The Commercial Car Journal

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Better Repair Facilities *Needed* in the Bus Business

Does the truck dealer realize the importance of Motor Bus Maintenance?

By Albert G. Metz

THE motor bus industry today is conceded to be one of the most active and enterprising branches of the automotive industry. Merchandising plans and sales have been going forward with great rapidity. New developments in design and production methods that are destined to reduce the cost of buses are being given a great deal of thought by the manufacturers. In fact, it is analagous to automotive industry in its earlier days when production and sales seemed to be the dominating factors that were considered of greatest moment by the manufacturers.

History is repeating itself. Manufacturers have come to the realization that the sale alone is not the only thing to be considered, but that the inevitable maintenance problem gradually develops to the point where it must be recognized, that is, provided the manufacturer wants to keep in the picture.

If service is an essential requirement in connection with the passenger and truck business, does it not stand to reason that the maintenance problems of the bus field will be of even greater importance?

Maintenance Means Success

The foregoing does not indicate that there is no adequate bus service being rendered today. All one has to do is to visit some of the maintenance establishments owned by the large bus lines to appreciate the fact that a tremendous amount of attention is being given to this problem. Those operators realize that the maintenance department unquestionably has much to do with the ultimate success of the bus system.

But there are thousands of buses operating in this country which do not receive proper care from a mechanical standpoint. Filling up with gas, water and oil, and keeping the vehicle in service just as long as it will hold together is not maintenance. Eventually the breakdown occurs and the bus is laid up in the shop for quite a period of time. Now all of this could be avoided had the local dealer who sold the bus contracted with the owner to take care of the maintenance of the vehicle.

Therein lies the opportunity for truck dealers all over the country. There are companies operating today who make a business of maintaining fleets of trucks for the owner. They are in the minority but they are growing. When a truck or bus owner operates a sufficient number of vehicles, he will usually find it more convenient also more economical to operate his own service station. However, with few trucks or buses it does not pay the average owner to attempt such service. That function legitimately belongs to the truck dealer. If this holds good in the truck business, certainly it holds good in the bus end.

Long and Continuous Service

Incidentally, the bus owner is perfectly willing to pay for such a service because in the long run, he benefits by having his vehicles last longer and giving practically 100 per cent continuous operation.

One of the most encouraging signs is the greater activity which the various organizations of the automotive industry are giving to maintenance problems. This being the case the dealer, who does not make an effort to secure some of the maintenance business that is practically lying on his own door step is missing one of the biggest opportunities that has ever confronted him. The dealer must not look at present conditions alone but must visualize what the future will bring in this respect.

The motor bus industry is only in its infancy. Thousands of small communities are awaiting for bus lines to bring them into more closer contact with neighboring cities and towns. The wise dealer will prepare for the expansion in bus service. The point we want to register here is that the indifferent attitude formerly given to maintenance by the manufacturers is a thing of the past.

It is in the smaller centers particularly that the future development of the bus business lies, both from a sales,

(Continued on page 53)

Cooperate *with* Your Salesmen

Topical Circulars and Market Investigations Get Business

By Lionel H. Williams

ARE your salesmen 100 per cent efficient? If not, what are you doing to assure the maximum productivity from their efforts Are you covering every outlet for possible sales?

These are some of the questions that Carey A. Jones put to himself when he took over the Nashville, Tenn., branch of the Federal Motor Truck Co. nearly twelve months ago. His endeavor since that time has been to eliminate the weak points that these questions uncover. The result was a 100 per cent increase in business in eleven months and the capturing of the Federal trophy for a three-months' sales record.

Elimination of Weak Points Brought:

1. **100% Increase in Business**
2. **Federal Trophy for Three Months' Record**

Cooperation has been the keynote of his organization. No salesman is perfect in every respect. If he is good at digging up prospects, very likely he is a poor closer. If he is a good closer he may not have the tact and patience to follow a deal through from its inception, and so on. **For some classes of business, the rough and ready salesman, the shirt-sleeve man, is the only one who can get to first base.** On other jobs such a salesman would not get past the office boy. Lucky is the manager who has salesmen versatile enough to fill both these roles.

With these facts in mind, Carey Jones picked his men carefully, and thereafter studied them closely. He talked to them personally and in the meetings they hold every morning, they got to know him well, and, what is equally important, to know one another. That is why there is an intense sense of cooperation in this group of men. Prospects are passed from one to another according to who is most fitted to handle the type of deal involved.

The salesmen who made a sales record for their company are not all men who have spent their lives marketing trucks. One was a Ford car salesman, one was a specialty salesman, another sold high priced passenger cars, and only the fourth was drawn from a Federal agency.

Opening New Markets

Behind their success is an intensive system of preparing the ground, educating prospects, and opening up new markets for prospects. **Sales promotion work from the office is considered a vital factor in this organization.** Letters to merchants point out the absurdity of carrying large inventories of stock when fresh supplies can be got in quick time by motor truck. New markets are pointed out, such as the demand for men, materials, and foodstuffs in various sections. Special lines of business are investigated and recommendations made.

All these things are of course tied up with the Federal truck and the salesman following up has some definite theme to enlarge upon. "Getting down to cases" is always much more effective than general stock sales talk.

Another line that is followed up by mail educational work is the advocating of equipment. Such things as the poor advertising value of sending shabby trucks to make deliveries in residential districts are pointed out, and the value of well-maintained vehicles emphasized.

The big thing, Jones asserts, is to thoroughly study business conditions, not only in your own territory but also in other districts where there is possibility of effecting a tie-up. For example one merchant made deliveries in rural districts up to 80 miles from the city. Investigation showed that he could not only save a return journey with an empty truck but widen his market considerably by establishing a base at a town 100 miles away. The truck now works from Nashville one day and from the other town the next day, and incidentally cuts out the whole of the dead mileage because the load will take care of the whole distance.

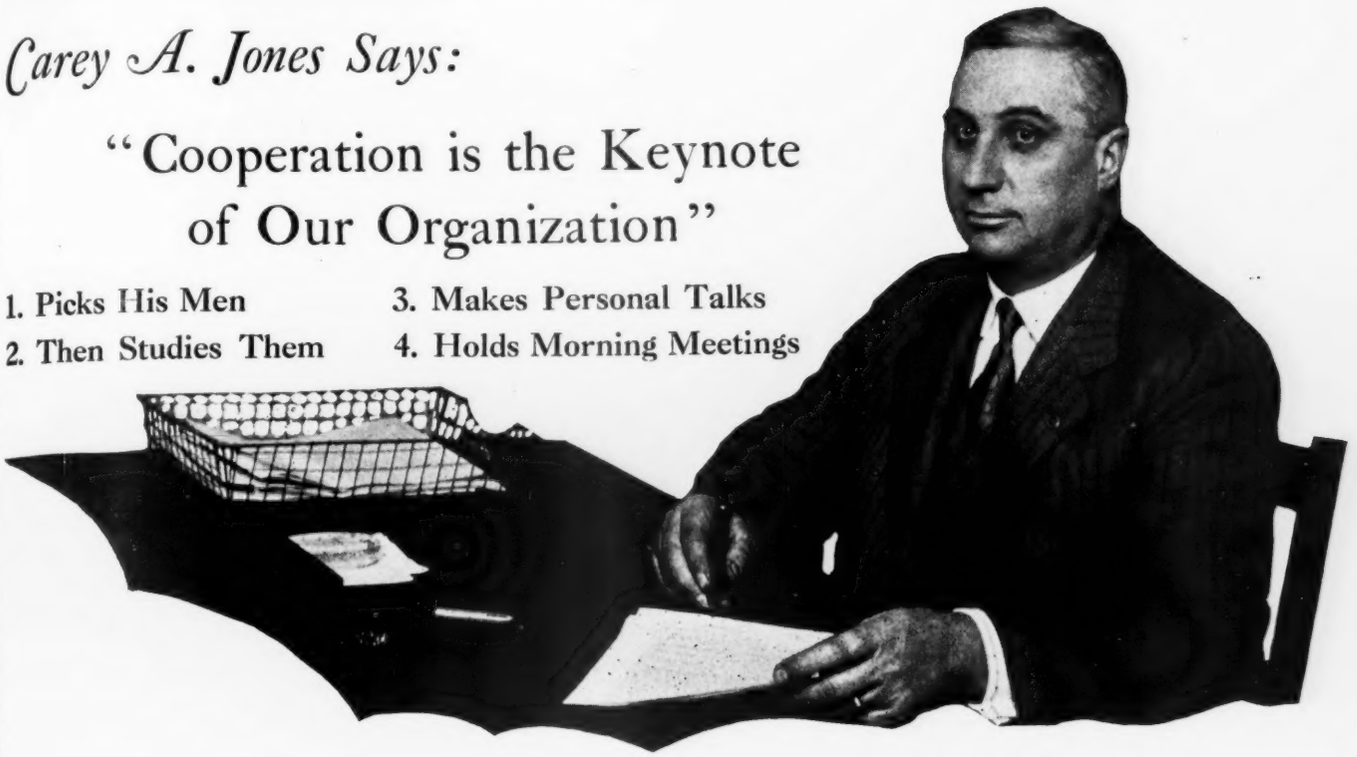
This particular merchant, making good on this line, established others—with Federal trucks.

Headquarters of the Federal Motor Truck Company, Nashville, Tenn.

Carey A. Jones Says:

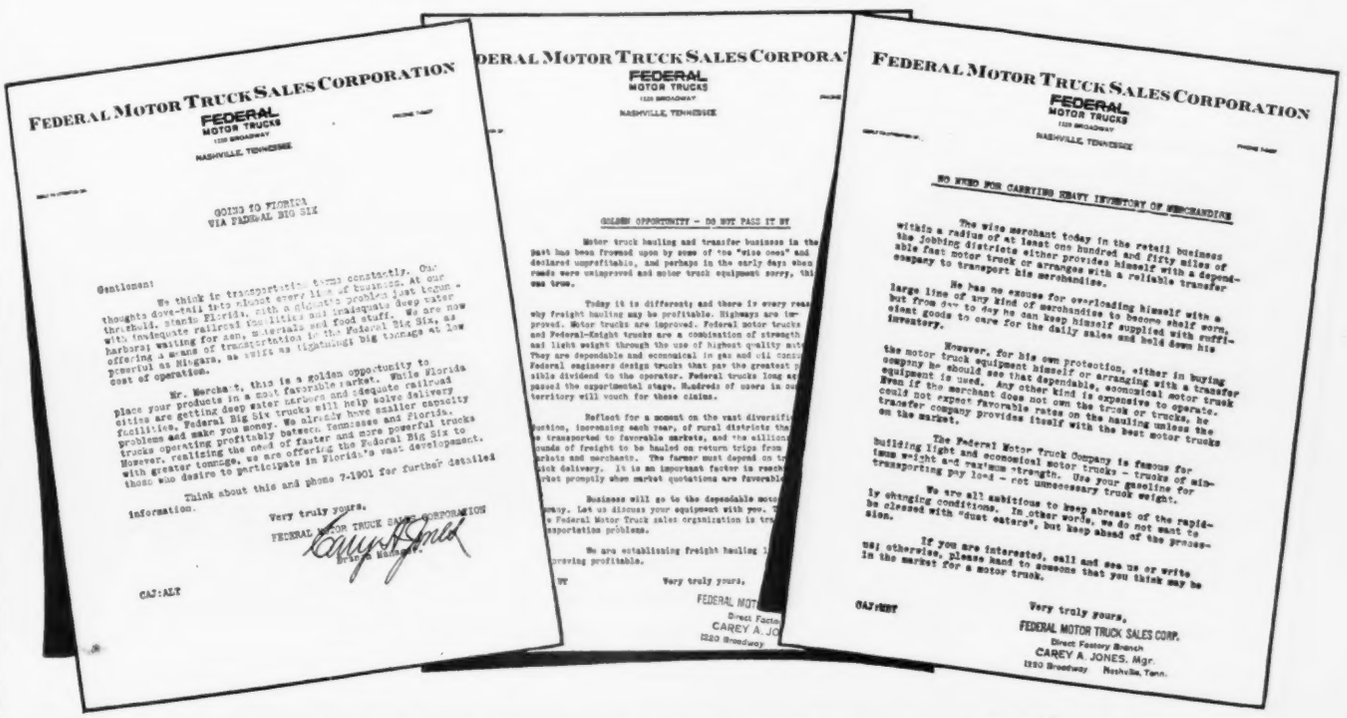
"Cooperation is the Keynote of Our Organization"

1. Picks His Men
2. Then Studies Them
3. Makes Personal Talks
4. Holds Morning Meetings



In the opinion of Carey Jones, it takes a specialist to handle used trucks. A different class of buyer is encountered and far different sales arguments have to be used. For this reason he has one salesman who specializes on disposal of the trade-in vehicles. Like the new truck salesmen, this man works on salary and commission. Incidentally if one of the new truck salesmen disposes of a used truck he gets the commission.

The Motor Coach and Bus Association of Massachusetts, is changing its name to Motor Coach and Bus Association of New England, Inc., as the value of the work which this organization has done through its legislative committee, its interstate division, and the general co-operation of its members is being recognized as giving great strength to the motor coach and bus business throughout all of the New England states. Practically every motor coach and bus line of prominence in Massachusetts, and most of the interstate lines running in or out of the state are now members of this association, and its two slogans, "The Public Be Pleased" and "The Power of Co-operation is Man's Highest Manifestation of Intelligence and Wisdom," are being demonstrated as great assets by the coach and bus operators and the great general public.



FEDERAL MOTOR TRUCK SALES CORPORATION
FEDERAL MOTOR TRUCKS
1220 BROADWAY
NASHVILLE, TENNESSEE

GOING TO FLORIDA
VIA FEDERAL BIG SIX

Gentlemen:

We think in transportation, terms constantly. Our thoughts dove-tail into almost every line of business. At our thresholds, stands Florida, with a majestic problem just begun - with inadequate railroad facilities and inadequate deep water harbors; waiting for men, materials and food stuffs. We are now offering a means of transportation in the Federal Big Six, as powerful as Niagara, as swift as lightning; big tonnage at low cost of operation.

Mr. Merchant, this is a golden opportunity to place your products in a most favorable market. While Florida cities are getting deep water harbors and adequate railroad facilities, Federal Big Six trucks will help solve delivery problems and make you money. We already have smaller capacity trucks operating profitably between Tennessee and Florida. However, realizing the need of faster and more powerful trucks with greater tonnage, we are offering the Federal Big Six to those who desire to participate in Florida's vast development.

Think about this and phone 7-1901 for further detailed information.

Very truly yours,
FEDERAL MOTOR TRUCK SALES CORPORATION
By C. A. Jones Mgr.

CAJ:ALT

FEDERAL MOTOR TRUCK SALES CORPORA
FEDERAL MOTOR TRUCKS
1220 BROADWAY
NASHVILLE, TENNESSEE

GOLDEN OPPORTUNITY - DO NOT PASS IT BY

Motor truck hauling and transfer business in the
past has been frowned upon by some of the "wise ones" and
declared unprofitable, and perhaps in the early days when
roads were unimproved and motor truck equipment sorry, this
was true.

Today it is different; and there is every reas
why freight hauling may be profitable. Highways are im-
proved. Motor trucks are improved. Federal motor trucks
and Federal-Knight trucks are a combination of strength
and light weight through the use of highest quality mat
They are dependable and economical in gas and oil consu
Federal engineers design trucks that pay the greatest
sible dividend to the operator. Federal trucks long ex
passed the experimental stage. Hundreds of users in ev
territory will vouch for these claims.

Reflect for a moment on the vast diversifi
portion, increasing each year, of rural districts tha
to transported to favorable markets, and the zillion
rounds of freight to be hauled on return trips from
markets and merchants. The farmer must depend on tr
quick delivery. It is an important factor in reache
market promptly when market quotations are favorabl

Business will go to the dependable moto
way. Let us discuss your equipment with you. T
e Federal Motor Truck sales organization is tru
nsportation problems.

We are establishing freight hauling
proving profitable.

Very truly yours,
FEDERAL MOT
Direct Facto
CAREY A. JO
1220 Broadway

FEDERAL MOTOR TRUCK SALES CORPORATION
FEDERAL MOTOR TRUCKS
1220 BROADWAY
NASHVILLE, TENNESSEE

NO NEED FOR CARRYING HEAVY INVENTORY OF MERCHANDISE

The wise merchant today in the retail business
within a radius of at least one hundred and fifty miles of
the jobbing districts either provides himself with a depend-
able fast motor truck or arranges with a reliable transfer
company to transport his merchandise.

He has no excuse for overloading himself with a
large line of any kind of merchandise to become shelf worn,
but from day to day he can keep himself supplied with suffi-
cient goods to care for the daily sales and hold down his
inventory.

However, for his own protection, either in buying
the motor truck equipment himself or arranging with a transfer
company he should see that dependable, economical motor truck
equipment is used. Any other kind is expensive to operate.
Even if the merchant does not own the truck or trucks, he
could not expect favorable rates on the hauling unless the
transfer company provides itself with the best motor trucks
on the market.

The Federal Motor Truck Company is famous for
building light and economical motor trucks - trucks of min-
imum weight and maximum strength. Use your gasoline for
transporting pay load - not unnecessary truck weight.

We are all ambitious to keep abreast of the rapid-
ly changing conditions. In other words, we do not want to
be classed with "dust eaters", but keep ahead of the procession.

If you are interested, call and see us or write
us; otherwise, please hand to someone that you think may be
in the market for a motor truck.

CAJ:MBT

Very truly yours,
FEDERAL MOTOR TRUCK SALES CORP.
Direct Factory Branch
CAREY A. JONES, Mgr.
1220 Broadway Nashville, Tenn.

Educational and inspirational mail matter on current events and methods help sales

A Truck for Each Condition

What Will the Future Bring in the Way of SPECIALLY DESIGNED TRUCKS?

By Leo T. Parker

IN certain sections of our country the roads are smooth and level, but in other parts the highways are rough, the hills are steep and the distance traveled between stops is great. It is true that there are certain motor trucks particularly adapted for the different classes of work, but as yet, motor truck manufacturers have not specialized in supplying a truck for each condition of usage. The general trend of the adoption of the specialized process of manufacture is making itself evident in many lines of merchandise, and there is reason to believe that the trucks of future years will be constructed for particular kinds of service. At present, however, a truck intended for use on hard roads is, also expected to render satisfactory and low-up-keep service in undeveloped sections.

Excessive Weight

A motor truck that is built to withstand the damaging use to which it is subjected in some of our mid-western states carries a considerable amount of excess weight when utilized on smooth highways. Furthermore, there are certain motor trucks, for instance, those used by down-town expressmen, which during the whole life of service are never driven over 10 miles per hour. Yet, this same type of truck may have been purchased by a country deliveryman who expects to have the truck give satisfactory service under entirely different conditions and permit it to travel at the rate of 25 to 35 miles per hour over distances of two, three or perhaps five miles without stops.

This is the day of specializing. The country is prosperous, and the population is thickly settled, whereby there is sufficient business to be had from a particular class of prospective purchasers, without the necessity of appeals to the complete masses. Why not so with the motor truck industry? There should be particular designs for certain kinds of work. Constructive trucks in this manner would permit them to render considerably better and long service,. and there would be a great demand for such trucks.

Operating Conditions Vary

It is sensible to believe that a two-ton capacity motor truck which will give dependable service in a mountainous district, cannot be truthfully rated as a two-ton truck on level city streets, unless the frame, springs and many other parts are reconstructed.

The railroads have long since realized the advantages of building engines for specific purposes. A yard engine cannot be expected to perform passenger train service. Neither is a freight "hog" built in a compromising manner to accomplish the duties of a yard engine. Furthermore, the railroad engines that are utilized in various parts of the country are built especially for the particular sections in which they are intended to be used.

Compromise Design

A motor truck that is built to give satisfactory service in all parts of the country and under the various conditions that are prevalent in the country and in the cities is, in a sense, a compromise for all of the conditions expected to be encountered. There is too much weight for the city, and particularly not sufficient strength and durability for use under especially bad conditions of travel. The city owner carries excess weight without advantage, the countryman who uses the truck on good roads also carries excess weight and is handicapped by having a motor not especially intended for his type of service, and the user

Meeting Individual Specifications

Vocational Manufacturing

WE have heard much about vocational selling, but what about vocational manufacturing? The point brought out in this article is that every truck should be designed for the individual job for which it is to be used. That may be idealistic. The quantity truck producer cannot be expected to produce a great variety of different chassis of the same size, as that would naturally make quantity production prohibitive from a price standpoint.

However, the manufacturer who is not producing in large numbers and whose business is confined to more or less local territory, would do well perhaps to give the vocational manufacturing idea serious thought. There are many opportunities for manufacturers to establish themselves as headquarters for trucks that are built for a specific industry.

In other words, if a truck manufacturer would select a certain number of industries and build trucks which are designed around the particular problems confronting those industries then he would establish a reputation for himself in those particular lines. Concentration on certain lines would pay that manufacturer because the buyer would look to the manufacturer as an authority who definitely appreciates the transportration problems which are peculiar to that industry.

—Editor.

What's Your Opinion?

on mountainous and muddy roads possesses a motor truck having axles, springs, frame and other parts undersize for this particular service, as well as having a motor which, in its construction, is compromised between its probable usage under such a wide range of varying conditions.

The recent experience of certain motor bus owners is an example of the absurdity of providing a rapid traveling, heavy-weighted vehicle with a "compromise" engine. Some of these buses traveled as much as forty miles per hour downhill, and found it necessary to creep up the hills in low gear.

Built for Peak Service

Not so long ago the modern passenger motor vehicles were unable to travel up a relatively steep grade without being shifted from high to the intermediate gear, but this obstacle is now overcome by almost all of the present day automobiles. The reason is obvious. The motors are built for the purpose of giving "peak" service. That is to say, the engines are capable of giving satisfaction, from the standpoint of power in combination with the gear ratio, in the most hilly parts of the country. But when these same automobiles are being driven over level highways, there is too much power in reserve at the expense of the owner. But this disadvantage cannot well be eliminated in passenger automobiles for the simple reason that a passenger car must be capable of traveling over great distances and under varying conditions of road surfaces, topographical character of the country, etc. This is true because the same machine may be driven from New York to California. Everybody tours at some time or other.

Quite recently I asked a large motor truck fleet owner his version of this problem and this is what he said: "I have a great many motor trucks in constant use. Some of them are in the downtown sections where it is impossible to travel at high speed, the result is I prefer to overload these trucks to compensate for the slow speed at which the trucks necessarily must move. The engines, however, are undersize for these large loads, although the frames, as a rule, will give good service. Generally I have an extra spring leaf placed in each spring. But with these disadvantages I am unable to get the service I should like to get out of these downtown trucks. Then I use the same kind of trucks for long, speedy country hauls. Under these conditions I find that the engines are geared too low to permit them to render the high class service one should expect. I have found by experience that there are a great many good motor trucks being manufactured, but none of them lay stress on having built the truck for a specific purpose. Some day, I am quite sure that this will be done. And the need is getting more and more apparent."

Exemplifying Limitation

Another owner said: "I am running an express from here to ————, a small town about 35 miles out. The roads are good and about level. I have come in with as much as three tons on a two-ton truck, but this is all it will stand. The engine is plenty powerful, but will not permit the speed I should be capable of making on this good road, and if I overload the springs flatten. I guess the truck would give just as good results in a hilly country but I am using it in a level part."

The various parts of the truck that are visibly affected were mentioned by this man. But the bolts, frame, wheels, tires, steering mechanism, transmission, rear axle construction, bearings and many other very important parts are invisible, but important on the bearing of this subject. A motor truck that is made especially for a particular purpose and mode of general usage, should be constructed throughout in consideration of the actual tests based on the science of metallurgy and strength of materials. By this method a motor truck for a specific purpose can be economically built and operated.

Do You Have the Customer's Viewpoint?

IN the motor truck industry the word "service" is a word of many meanings. To the man purchasing his first small truck "on time," service appears to be sort of a fairy godmother to protect him from trouble in the future. To the fleet owner, service means "maintenance" with a minimum of cost and a maximum of adaptability to his particular requirements.

The kind and quality of maintenance given varies greatly. The little shop—maybe a remodelled barn in the owner's back yard—with one or two mechanics and the large service station in the city, designed throughout for its particular purpose, each gives service and all the graduations in between these extremes do likewise. Some of the very smallest shops give excellent service to their few customers and some of the larger ones serve a large clientele satisfactorily. But a certain percentage of shops of all sizes give poor service.

What is It?

What makes this difference? What quality makes one shop better than another? Is it size, equipment, location or (in many cases) prices charged? Certainly there is something more important to be considered.

In the final analysis it is simply the "determination" to give service that counts, and which is the essential factor in every successful service station. Location, building, equipment, lay-out, capital—all are secondary to the will to give service.

An understanding of the viewpoint of the customer is one of the foundations of service. Truck owners have very decided opinions on the subject. Some of them are, at times, almost unreasonable in their demands, but if they are *willing to pay for what they want* they can have it—from your place or elsewhere.

Here's an example of how the truck owner feels about it. An owner of a large fleet of trucks secured a contract for hauling sand, cement, stone and other building material on a large operation. During the work one of the trucks broke down and it was taken to a factory branch service station for repairs. Instructions were given to rush the job and to have "overtime" work done if the truck could be finished sooner. Another truck was hired to take its place and the work on the truck started. When Saturday noon came, the usual quitting time in the shop, the two mechanics on

(Continued on page 15)

Mr. Dealer Why Don't You

Don't Let Factory Branch Competition Frighten You. There is Enough Business for Everybody

Now is the Time to Get It

*By Paul Webb**

IF dealers were performers there would be no such things as factory branches. A dealer's laxity has caused his factory to put a branch in your town. He, like many more of you, has killed the goose that laid the golden eggs, because he did not recognize his responsibility. Your factory wants *you* to sell trucks, and when you fail they have no alternative but to seek other means of maintaining the demand for their product that their production schedule calls for. That explains why you have factory branch competition instead of dealer competition. Any factory would be glad to turn its account over to you if you could handle it as they do and assure them of the same volume of business.

NEVER were the conditions better for the independent dealer than they are now. Business is good and promises to continue so. Manufacturers who are satisfied with their dealer organization do not want to substitute branches. As long as they can get the volume of business they are entitled to expect why should they tie up capital to no further benefit? When a dealer fails to make the grade, it is almost always a sure sign of inexperience and the lack of a capacity of keeping abreast of the ever-changing conditions of truck merchandising. Factory branch managers have made the same mistakes, of course, but they have not gone under solely because they have nad their factories behind them. Bad trading is no better for the branches than it is for the dealers, and the current idea that branches are out to grab all the business that they can get at any price is all so much nonsense.

All businesses have their slack times and in most of them it is often necessary to make unprofitable deals, but the competitors know just what they are doing. And so it is with motor truck selling. The good has to be taken with the bad, and when a branch house cuts a price they know just how good a deal they are making, and take into consideration all the items of expense incurred in making a sale, some of which are apt to be overlooked by dealers.

For example we may figure a deal as the branches do, on the net basis, so that when we approach the buyer we shall know exactly what we can do:

Chassis f.o.b.	say	$1500
Freight	say	60
Handling charge	say	30
Truck maintenance	say	25
Salesman's commission	say	75
		$1690

Financing charge, if any, should be added to this.

*International Harvester Co., Nashville, Tenn.

The actual net cost of the vehicle is $1690. Now say he has a 5 year old truck of orphan make to trade. It isn't likely that any branch will put any money into such a truck. They will probably come back at the buyer with a proposition of $1900 or $2000 and his old truck. If they get $1900, they have made $210 and the old truck.

That does not sound like much profit, but the money is in the old truck. Here is where so many dealers make their initial mistake. They look upon such trades as extra allowances and take the loss, which is the wrong policy. They should fix up the old vehicle so that it looks at least respectable; repair damaged fenders, put on new headlights and a new cushion in the driving seat; repair the floor boards and the body, and do a good paint and striping job. **Paint pays better dividends on used trucks than anything else. Don't just look on the used truck as a white elephant.** Make it look nice, and sell yourself on its value to the man with little capital, then sell it to such a one.

Difference of Opinion

As far as the user is concerned, the average used truck is worth a lot more than the dealer gets for it. Appearance has little relation to performance yet appearance is what the buyer is willing to pay for. **The appeal of a used truck is the low down-payment, and it is easy to get fair-sized notes signed for the balance. Repossessions with this class of trade are of course higher, but not so costly as to be undesirable. On the other hand the loss of value due to usage is not anything like so great as in the case of a new vehicle.**

Truck buyers are not so dubious about buying orphan makes of trucks as they once were. So complete are the resources of the parts industry and so well organized the merchandising that it is possible to procure standard parts for practically any make of vehicle ever marketed within the last decade.

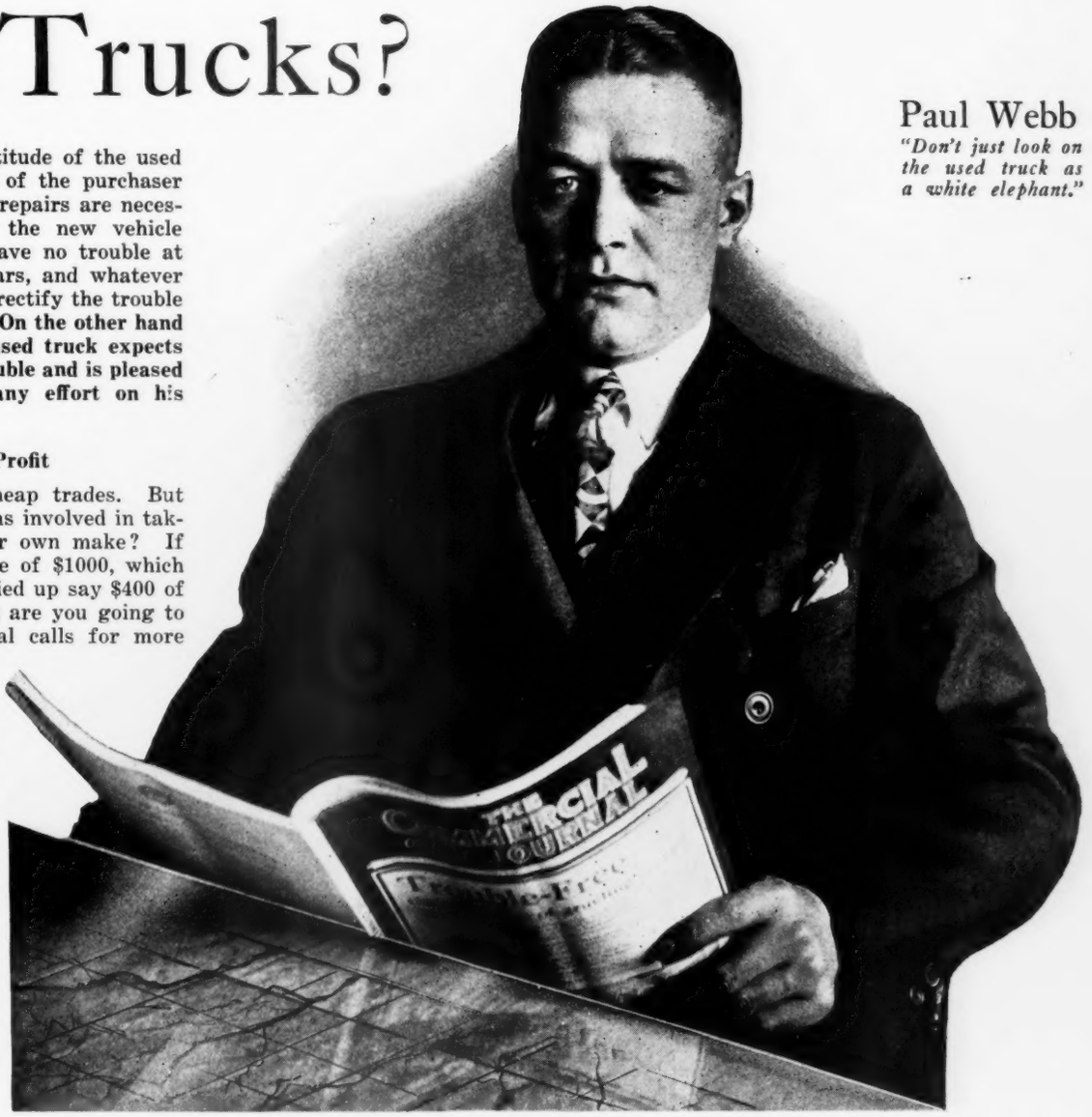
Here is an example of what can be done with a used truck in fair mechanical condition. A trade I took in, judged by appearance was worth about $35, which was the price the junk dealer offered for it. I spent $17.50 on a paint job, $5 for striping, repairing headlights $4, welding and hammering fenders $2.75, covering seat cushion $2.50, replacing floorboards and cover with new linoleum $3, tightening one connecting rod and adjusting brakes $5, total $39.75. That truck sold for $517. It was a 3-year-old one-tonner.

That is but one case among many, but it serves to show that resale of traded-in vehicles is worth a little time and trouble, and may make all the difference between a profitable deal and a loss.

One other important aspect is that the new truck is sold under an iron-clad guarantee that may commit the dealer to all kinds of expense, and yet the profit on that sale is small. **In contrast the profit on the sale of the used vehicle is considerably more and yet there is no commitment to further expense in the form of guarantees.**

You may say that the sale price of the used truck mentioned above was higher than you could get under ordinary circumstances, but if you put a guarantee on your used trucks you can sell them for far more than the guarantee is ever likely to cost you.

Sell Trucks?



Paul Webb
"Don't just look on the used truck as a white elephant."

Contrast also the attitude of the used truck buyer with that of the purchaser of a new vehicle when repairs are necessary. The owner of the new vehicle feels that he should have no trouble at all for a couple of years, and whatever provision you make to rectify the trouble he is still dissatisfied. **On the other hand the man who buys a used truck expects a certain amount of trouble and is pleased whenever you make any effort on his behalf.**

Insure a Profit

So much for the cheap trades. But what of the bigger sums involved in taking in a truck of your own make? If you make an allowance of $1000, which means that you have tied up say $400 of your own money, what are you going to do then? Such a deal calls for more than a surface gloss on the truck, for properly handled and properly guaranteed a truck involving a big allowance should insure a big final profit.

In such a case the only thing to do is to give the truck what can be called a "remanufactured" job, and sell it under the same 90-day guarantee that is given with new trucks. It is not generally known that there is a very definite market for this remanufactured equipment. Some companies, such as a prominent coal mining and distributing corporation in the southern states, will buy nothing else.

Then there is the question of parts stock. At the time of their inception, the factory branches had the advantage of being able to carry enormous parts inventories by which they could insure speedy service to their users. **This condition is no longer of first importance, for parts and unit distribution is so well organized that replacements can be procured from a variety of sources at short notice.**

Capitalizing Appreciation

But there is also another aspect of the service situation that is not so obvious. In it lies a little point of psychology that experience has demonstrated. A customer expects quick parts service and as a rule gets it. He has had no more than he felt he was entitled to demand and the transaction leaves no particular impression on his mind. Suppose, however, that you can not at once get the part he wants, and his vehicle must be laid up until it comes. Whatever trouble you take to rush the part through the delay is sure to irritate and the whole transaction will be unsatisfactory. If, on the other hand, you can say "Here is a truck you can use until your own job is ready," in nine cases out of ten he will think you are doing him a favor and appreciate it accordingly.

Dispersing Indifference

This does not mean that you must keep a fleet of demonstrators ready for such emergencies. Some of your $35 trade-ins will do the trick and probably make a friend out of a disinterested customer.

And so we see that many of the fears that keep the dealer out of business are largely imaginary, and that conditions at the present time are such that it is more than possible for the really live dealer to get his share of profitable business. One of the principal reasons for the success of branches is that they are not afraid to employ enough good men to sell the volume that they should —and the dealer is.

Electric Railways Use Many More Buses

Rapid multiplication of the number of buses operated by electric railways from 75 units running on a few miles of route in 1920 to 4452 covering more than 12,000 miles of route in 1924 was shown in a report of G. C. Hecker, special engineer of the A. E. R. A. reported in the May Journal of the S.A.E.

"Approximately two-thirds of these operations are unprofitable and presumably will be for some time," said Mr. Hecker, "although in general the business is increasing at a rate that undoubtedly will make a number of the operations profitable."

A. Rist, of A. Rist, Ltd., Lowestoft, England, will arrive in this country about June 1, to meet American manufacturers of automotive accessories and equipment who wish to make manufacturing or distributive arrangements abroad. Mr. Rist may be reached care of G. W. Sheldon & Co., Ltd., 115 Broad Street, New York, during his stay in this country.

Approach *is* 1/2 *the* Sale

Initial Contact Must Compel Prospect Attention and Confidence, Without These Even the Best Sales Program Will Prove Futile

Analyze Your Approach, Then Strengthen It

By Martin J. Koitzsch

ALL salesmen, no matter how expert, are more or less procrastinators. Honest admissions would reveal many a name in salesmen's personal note-books for which visits have been postponed time and time again for any number of reasons. If an analysis of these reasons were possible, a very interesting story would be told.

Assuming that these names are prospects, which they are, otherwise they would not have been noted, such an analysis would divulge the following naked reasons for neglect.

1. **Psychological fear.**
2. **Fear of a weak approach.**
3. **Incompetence; lack of information.**

Stripped of all explanatory embellishment and reduced to naked substance these reasons appear harsh and, perhaps, unjust. But if a true status is desired unequivocal statements, bald though they may be, must be made. However, an open mind will recognize their existence and will at the same time aid in banishing a condition that is largely a case of mental attitude. It is but human to qualify mental and physical lapses with plausibilities. Consequently, reasons are draped in all sorts of disguises and in many cases so completely that the persons themselves are invariably deceived as to the true reasons.

Entree

It is not infrequent for a salesman to say, "If I could only get an entree to Blank & Co. I would be satisfied." In that wish lies the whole crux of the situation. With a sound approach the salesman, if he is a salesman, can focus the prospect's attention on whatever he may have to say, after which he can project his sales talk, the merits of which then become the deciding factor.

Furnish the average salesman with an approach and you furnish him with a sale half won. Since approach is such an important factor, every effort should be made to strengthen this part of salesmanship.

Of course, there are various types of approach, depending upon the individuality of the salesman. There are: the usual "good fellow" approach, the second-party approach, the friendship approach, the aggresive approach, the conventional "Good Morning" approach, the personality approach, etc. But the best, and the one with the greatest range of application, is the "transportation" or "money-saving" approach. Development of this, of course, requires exhaustive study and experience, yet is one which should be required of all salesmen if they wish to qualify as such.

Knowledge

If a salesman is versed on cost figures, and can determine the various figures responsible for the cost per package, per ton or load in the various industries and under varying conditions, he has a concrete foundation for the construction of a sound approach. With this knowledge, together with data secured through pre-investigation, an approach can be established on the premise of selling low cost transportation. He is in a position to expound competently the merits of his economy story and besides is equipped to prove any of his assertions.

While not quite as essential, a salesman should also be familiar with truck design and operation, together with details of maintenance, so that these angles can be intelligently discussed should occasion arise. But truck design details should never be emphasized in initial interviews as they tend to involve the salesman in technical wrangles. Any such tendencies by employment of tact can readily be guided to less dangerous subjects. Further, the exploitation of such data is apt to degenerate into argumentative comparisons with competitive units, all of which will only tend to create so much more resistance. Hence, while not unimportant, specification data has no place in the approach. Above all, remember that the primary object of the initial visit is to establish a contact, a stepping stone.

Economy

From all of which it follows that the essence of a salesman's approach should be based on being able to save so much money for the prospect. It is his task

to sell his prospect on the thought that he is there to improve the present system; to cooperate with him, and to reduce his cost per package, ton, etc. Of course, before he is in a position to make such assertions, he first must post himself by studying the experience of similar or allied lines of business, found from data and statistics which are available in most every dealer organization, until he becomes thoroughly conversant with the business.

Equipped with specific information he need not feel that he will make ridiculous statements. Then again, with this knowledge, sometimes an overly ambitious salesman is apt to become too self-assertive. This should be carefully avoided as it will invariably inspire resentment and antagonism. If a salesman has reasons for believing that he can lower a prospect's operating cost, he should present his reasons tactfully. He can further tone down his statements and qualify his assertions by suggesting his willingness to analyze the prospect's actual operating conditions under no obligation to him. While this approach will often serve, it is just as apt to fall short, but the salesman should not be discouraged.

Tenacity

If the prospect is not interested at this time, terminate the interview as smoothly as possible and try to pave the way for a future visit. As an aid to the later visitation, the salesman might leave literature containing illustrations, cost data, and brief outlines of economies exacted by other users. If offered judiciously, the salesman can assure himself of the prospect actually reading the literature. Unfortunately, the tendency is to slip a piece of literature on the prospect's desk and say "Read this at your leisure." As a result the literature invariably finds the waste-paper basket upon the salesman's departure. It is also a part of the salesman's job to sell literature.

Resourcefulness

After a certain lapse of time, the salesman should again offer to analyze this particular prospect's delivery conditions. A second rebuff should not daunt him. Determination and resourcefulness will lead the salesman to the stable, garage or repair shop, where with a little diplomacy he can invariably strike up a talking acquaintanceship with the foreman in charge. A pleasantry or a cigar will often serve the purpose. By gradually guiding the conversation along the lines of the foreman's problems, the salesman will soon be rewarded with actual knowledge of the various departments of the delivery system and perhaps, if fortunate, of a little difficulty for which he can later offer a real remedy.

Returning to the office the salesman can then draft a rough analysis with the data thus secured, plus cost statistics from vocational selling data, and construct a working foundation that will show how certain light economies can be effected. Such a set of approximate cost figures can be readily developed on any type of delivery equipment.

Attention

With this analysis the salesman enters the prospect's office for the third time. He now has sound ammunition. He has confidence. He can state definitely how he can save the man money. He gets the prospect's attention by mentioning a few conditions with which the prospect is actually familiar. The saving of money now really means something to him, and if he is a business man he will not refuse to listen to a brief outline of a plan that will save him money. Thoroughly aroused, the prospect now permits the salesman to make a transportation analysis, with definite operating data.

The salesman has consummated a successful approach. He can now develop his sales story, having finally secured the prospect's attention.

The map at least points the way. Without it any quest is futile

Do You Have the Customer's Viewpoint?

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the job estimated that the job could be finished by working Saturday afternoon and all day Sunday. They were paid overtime rate and were told to go ahead with the job so the truck could be used Monday morning. The truck was delivered to the owner ready for work at 7 a. m. Monday. But the men put in a 24 hour day, stopping only for meals, to finish the job on time. The owner of the truck was saved one day's rental of the substitute truck, which more than paid for the excess charge for overtime.

Another truck owner, who used his truck on a route three days in a week, had some repair work done on one of the off days. He came to the shop about the usual quitting time and was told by the mechanics that the job would not be finished that day. He asked about overtime but the mechanics said they were not paid anything extra for overtime, just straight wages by the week. A suitable tip to the men kept them on the job about an hour longer until the job was finished.

Which of these places is selling service?

Service Needs Determination

The proprietor or manager of a service station who has the determination to give real service will use all possible means to satisfy the demands of his customers. And that sometimes means considerable trouble to get parts and equipment needed in repair work. And it means, too, knowing where to go to have outside work done. The shop may not have a cylinder reboring outfit but the live, wide-awake, manager will know of a really good shop doing this sort of work.

The owner holds the dealer or service station doing a job responsible for all of

(Continued on page 18)

Telling the Public About A NEW BUS ROUTE

THE Arrow Bus Line began operations on the New York and Paterson route on December 12th, and in beginning this service the company took care that the people and territory it intended to serve would be fully cognizant of the commencement of this service.

The company ran full page advertisements in local newspapers telling all about the new service. This is in contrast to many lines now operating throughout the country which do not even publish a time table advising travelers when the buses run. It is especially in contrast to some lines which do not even show the names of the towns and cities covered on the buses themselves.

Many bus lines lose a great deal of traffic by this lack of informative publicity. Even though local traffic may be posted on the runs, there is a great deal of transient traffic in every community which does not know and this transient traffic can only be informed through the dissemination of time-tables and posters made available at such points as transients frequent. No better form of advertising can be had than the names of intermediate and terminal points clearly displayed on the body of the bus which advertises the fact as it passes through the streets. Besides this doesn't cost more than the painting.

The following form of sign is suggested for this purpose. It shall be

(Continued on page 24)

THE PATERSON EVENING NEWS FRIDAY, DECEMBER 11, 1925. PATERSON'S FOREMOST NEWSPAPER

A SAFE BUS TO N. Y.

Paterson To Times Square By "The Arrow"
A Half-Hourly Service By This Great Bus Co.

PATERSON
ALEXANDER HAMILTON HOTEL
CLIFTON
PASSAIC

TAKE THE ARROW COACH TO NEW YORK

TIMES SQUARE
NEW YORK CITY
LONGACRE BUILDING
42ND ST.

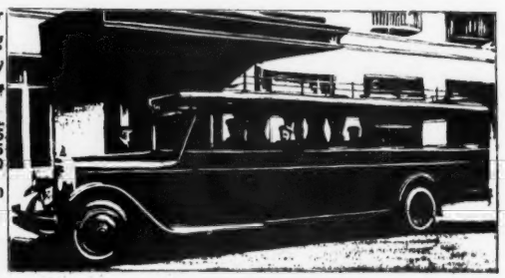
Leave Alexander Hamilton Waiting Room Every Half-Hour

Fares to New York

	Single Trip	Round Trip
Paterson	1.25	.75
Clifton	1.10	.65
Passaic	1.00	.60
Rutherford	.80	.50

Beautiful New Waiting Room at Alexander Hamilton Soon to Open

The beautiful new waiting room in the Alexander Hamilton Hotel will be opened shortly for the convenience of our patrons —the latest de luxe touch to make the Arrow the most popular route of coach transportation to New York.



ONE OF THE GREAT FLEET OF DE LUXE COACHES NOW RUNNING HALF HOURLY TO THE HEART OF THE SHOPPING AND THEATRE DISTRICT FROM 7 A. M. TO 1:30 A. M.

HOURS OF LEAVING

Beginning at 7 A. M. Arrow de Luxe coaches leave the Alexander Hamilton Hotel in Paterson, continuing, half hourly, until 12 midnight.

Leaving the New York terminal in front of the Longacre Building, north-east corner, Broadway and 42nd street, Arrow coaches run on half hourly headway until the late theatre patrons are ready to return home, with last coach 1:30 A. M.

Nothing could be more convenient for the theatre-goer or shopper! The Arrow coaches to and from New York connect with Arrow Bus Service to Ridgewood, Ramsey, and way to Suffern. Also with the Arrow Buses to Montclair and Newark.

Route of Arrow Bus--Paterson to New York

On leaving the Alexander Hamilton Hotel in Paterson, Arrow de luxe coaches follow Market Street, to Union Street, to Smith Street, to Hamilton Street, to Grand Street, to Jackson Avenue, to Washington Avenue, to Main Street. Along Main Street the Arrow coach proceeds to Clifton, (the continuation of Main Street, Paterson) and thence to Passaic. Turning left over the tracks at the last railroad crossing in Passaic, the coach proceeds through Rutherford to New York. At the New York side of the 42nd Street Ferry, the coach proceeds to 7th Avenue to 40th Street, thence to Broadway, down Broadway to 33rd Street, Herald Square, around and up 6th Avenue to 39th Street, thence up Broadway to the New York terminal, at 42nd Street (Longacre Bldg.)

Leaving New York the Arrow Coach goes directly to the 42nd Street Ferry. (It does not return via 33rd Street, Herald Square). From the New Jersey side of the 42nd Street Ferry the route is the same in reverse order to that on going to New York.

A Convenient Service for Shoppers and Theatre Goers
Paterson, Clifton, Passaic, Rutherford, Times Sq., N.Y.

A LUXURIOUS, comfortable motor coach is now operating half hourly between the Alexander Hamilton Hotel, Paterson, Clifton, Passaic, Rutherford—and the shopping district of Herald Square, 33rd St. and Broadway, with Times Square, Northeast Corner, Broadway and 42nd St., (in front of the Longacre Bldg.) New York City. This wonderful, new improvement for the comfort and convenience of the residents of these communities affords a pullman motor, service, operated and backed by the Arrow Bus Line, a company that is now a strong New Jersey institution.

With the difficulties of modern traffic and the strain of night driving, there is no mode of travel so comfortable and convenient as one of these luxurious coaches for the theatre-goers. No subways, no tubes, no dusty ramps or passages! No rushing for last trains. One leaves the theatre and boards the coach in the heart of famous Broadway or the shopping district, and in one hour and fifteen minutes arrives within a moment's walk of his own home. This schedule is dependable and reliable! Arrow Buses de luxe adjoin or deposit through passengers to or from New York, at any point en route from Paterson to Rutherford, with Express Service only between Rutherford and New York City.

DRIVERS are careful, courteous and experienced. They are the pick of the crew which has operated the great fleet of Arrow buses handling the heavy traffic between points in Northern New Jersey, which have been practically impassable by any other public conveyance, except through great inconvenience and delay, for the past eight years.

Have you ever considered that the mere responsibility of an engineer or the captain of an ocean liner rests upon the shoulders of a 'bus driver?

Arrow 'bus drivers have stood the test through years of driving experience. They must be safe, reliable and careful to pass our rigid examination.

They have a clear record of safety and a minimum of accidents as compared with many other motor transportation lines.

As we pay a very high salary to our drivers we can command the pick of the motor'ed men in the business. Many other companies entrust your life to half grown, irresponsible boys, because they pay a small rate of wages and cannot engage the best men. Arrow drivers have a wonderful reputation for care and courtesy.

A free convenience of waiting for the Arrow 'Bus, the strong, New Jersey Institution of Motor Transportation, will pay you many times to safe travel.

Now the Arrow Bus Line is operating the best Coaches and establishing a similarly reliable transportation to New York where its past record and performance may serve as the criterion for the future.

Below are the hours for equal comfort.

ARROW BUS LINE

Bus Advertising Should Not Only Sell the Service But Should Also Provide Operating Details and Other Information

Motor Trucks *put* Bananas *on the* Map

Potential Market Increased from One Hundred to Ten Thousand Square Miles

ONE 1½-ton truck saves $40 a day for E. S Hertzka, of Nashville, Tenn., who is exclusive wholesale car-lot receiver of all fruits and vegetables from coast to coast. This saving is equivalent to one cent per pound on each load of bananas. Shipping two tons by rail costs $40 for freight and another $40 for crates, not to mention the labor cost of crating. Going by truck the fruit does not need to be crated and the ultimate consumer gets the benefit.

More Than Crate Saving

Of course it does not cost $40 to operate the truck over this trip of 120 miles, nor even $30, so there is still something left for the wholesaler.

When these simple facts came to the attention of Hertzka, a whole world of possibilities opened before him. Getting down a map he made a 100-mile circle around the city of Nashville. In it he counted 100 towns of 3,500 population. To one of these he sent a truck load of fruit which the driver-salesman was to dispose of on the route as far as possible. When the man returned at the end of the day he had sold to small stores in out of the way towns the whole of his load. The same trip was made a few days later with double the former quantity and the truck still came back empty. On the third occasion two trips were made in the same day and 180 per cent more fruit sold than on the second trip.

Supply Depot Created

From this experiment a fixed daily route was evolved, for one truck. Then another route was discovered, more than 100 miles long. In this case the long return journey without a load suggested the need for a change of tactics. The next development therefore was the choice of a town between one and two hundred miles from Nashville in which a small supply depot might be established.

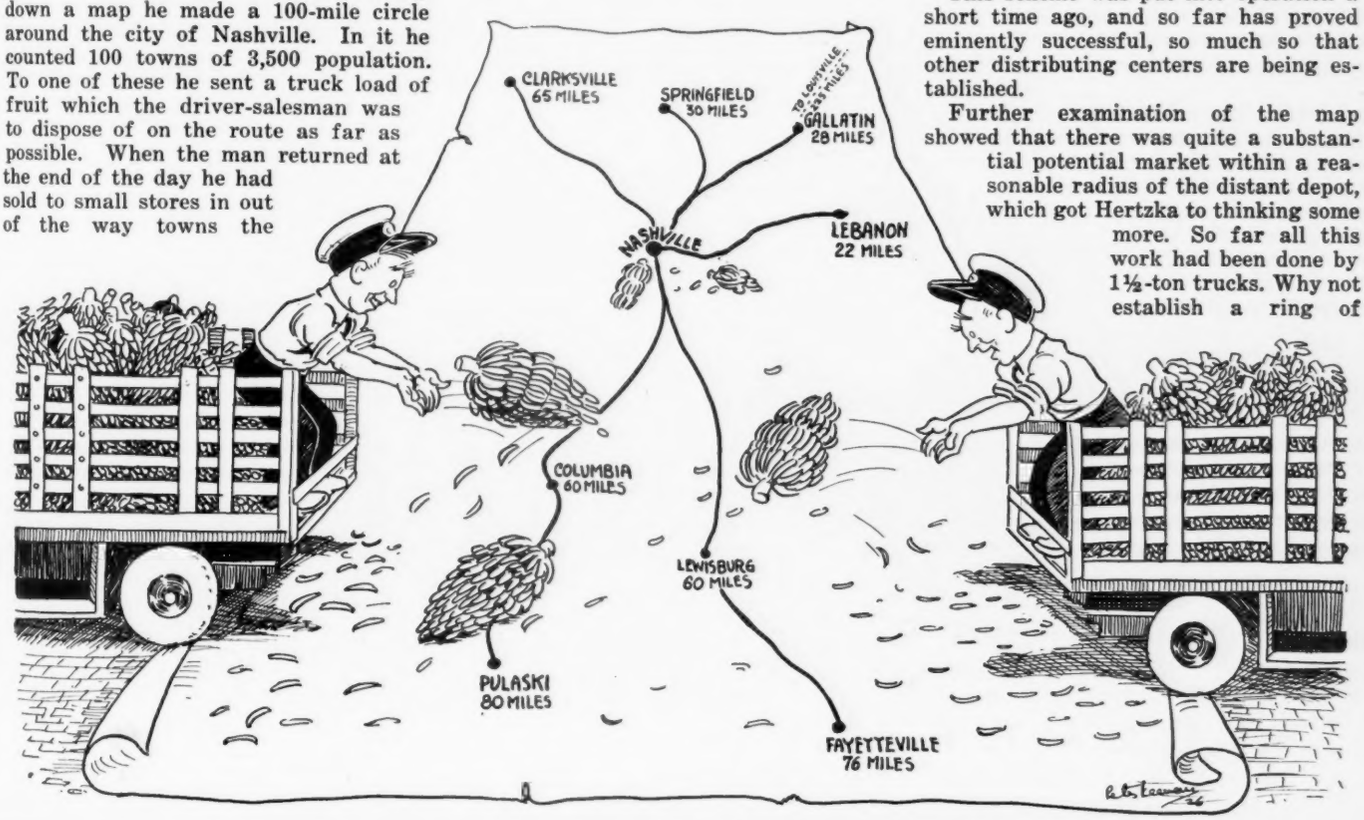
In investigating this proposition it was found that it would be possible to effect a saving in rail freight by diverting one carload at a time to a distant city. The fruit delivered there would cost no more, and perhaps less, than when delivered at Nashville. At this town would be established a small store with a caretaker in charge. The truck would then operate between Nashville and this distant station, disposing of its load enroute.

Daily Deliveries Unnecessary

One day the load would be taken from Nashville and the truck would spend that night at the station, returning in the morning with a fresh load from the store. The route would, however, not be quite the same because a daily supply of fruit is rarely necessary in the smaller towns.

This scheme was put into operation a short time ago, and so far has proved eminently successful, so much so that other distributing centers are being established.

Further examination of the map showed that there was quite a substantial potential market within a reasonable radius of the distant depot, which got Hertzka to thinking some more. So far all this work had been done by 1½-ton trucks. Why not establish a ring of



Trucks permit economy in banana distribution over the Hertzka routes

small stations from which these small trucks could operate, and feed the stations by 5-ton trucks working from headquarters?

Details of such an arrangement are now being completed and soon Hertzka will have added a few more hundred miles to his market territory.

Apart from all other questions, motor truck delivery of fruit is popular with the retailers for two very cogent reasons. One is that he has direct personal contact with the wholesaler through the salesman. Complaints can be adjusted on the spot with greater satisfaction to both parties. The other reason is that he gets store-door delivery. He has no worry over collection or demurrage.

Units used in the fleet of an Eastern fruit wholesaler

These are advantages in which the wholesaler shares, and in addition he has one other that is often of considerable value; in distributing in distant towns he saves a 3 per cent commission charge that he would otherwise have to pay for someone else to sell his stuff.

Altogether the motor truck may be said to be the backbone of the fruit distribution business as far as the Hertzka company is concerned, and what this one man can do, others can do with equal profit. Similar delivery conditions in other businesses exist.

Basic Rules of Economical Life and Obsolescence *recognized by* Fageol

"When Should a Motor Car be Discarded?"

This question has been quite puzzling in the past years because there have been so many variable phases and so few standards in the industry.

Obviously it cannot be solved on a mileage basis, since some buses have passed their period of usefulness in a hundred and fifty thousand miles, while other makes, properly maintained, will be giving satisfactory service at the end of a million.

Granting that the size of the coach is large enough to meet the needs of the service, there are only two causes for discarding equipment—obsolescence and excessive mechanical maintenance.

It is unlikely that obsolescence will be a serious factor, if your equipment is of modern, low-center-of-gravity, built-for-the-purpose design, but it is certain to be so if equipment designed for some other kind of service is adapted to bus use.

Most coaches will operate over quite a long period of time at a fairly constant or normal cost for mechanical maintenance. Then the cost begins to crawl up.

The two factors which determine the proper time to discard a motor coach are as follows:

1. When the cost of mechanical maintenance equals the cost of normal mechanical maintenance, plus depreciation, or when mechanical maintenance equals approximately 6 cents per mile.

2 When, through lack of passenger appeal, gross receipts per mile could be increased by using more modern equipment.

AMERICAN CAR AND FOUNDRY MOTORS COMPANY

F. R. FAGEOL,
Vice President.

Do You Have the Customer's Viewpoint?

(Continued from page 15)

the work. If some of it must be sent out the owner depends upon the dealer to have the outside work done properly.

Many of the smaller shops keep up their reputation for good service by using the very best outside assistance they can get.

There may not be a welding outfit in the shop but a good welding shop is known and used. And so on with other work of this character.

An Example of Service

A truck owner noticed a slight leak of oil out of the rear axle of his truck. Cleaning and examination showed that the pressed steel housing was cracked and that several of the rivets were loose. The truck was taken to a garage and the rear axle taken out. The garageman planned to send the housing by truck express to a nearby city to have the necessary welding done. But the housing could not be shipped this way until the next day and would, probably, not be returned sooner than three or four days. Such a delay was a serious matter to the truck owner and so the garageman inquired of another dealer to find out if the job could be gotten through sooner. On the advice of this dealer the housing was taken in a touring car to a welding shop nearby and was welded right away. The housing was taken back and the job completed the same day. The dealer's knowing about this one welding shop saved the truck owner several days loss of the use of his truck.

All of which indicates that a reputation for good service does not depend solely on shop equipment but a determination to follow the job through.

When the FACTORY *Becomes a* CITY *in* ITSELF

The Manufacturer Turns to Trailers to Solve His Intra-Plant Hauling Problems

By J. F. Higbee*

WHEN a manufacturing plant grows so big that it covers a ten- or twenty-acre lot, the job of merely keeping it in repair is a large order. Construction and reconstruction go on continually. Building materials are constantly moving to and fro inside the plant itself or about the premises. Piles of waste accumulate and must be carried away. The superintendent finds that he must maintain some sort of disposal system. If his processes call for the use of many furnaces and kilns, or ovens, piles of broken brick and similar materials which have outworn their usefulness and must be replaced rise all about his yards like snow banks in Montreal. Maintenance alone becomes a greater problem than smaller manufacturers meet in their entire production system.

Since this phase of the manufacturer's operations is a necessary evil and unproductive of any direct revenue, he considers it with a cold and calculating eye. The nearer he can bring the cost of his plant disposal system to zero, the better he likes it. Efficiency and economy, then, are matters to which he gives a great deal of constructive thought.

The situation calls for two things: equipment which is mobile, constantly accessible, and capable of carrying bulky or heavy loads; equipment which demands a minimum of labor for its operation, and finally, equipment demanding the smallest initial investment.

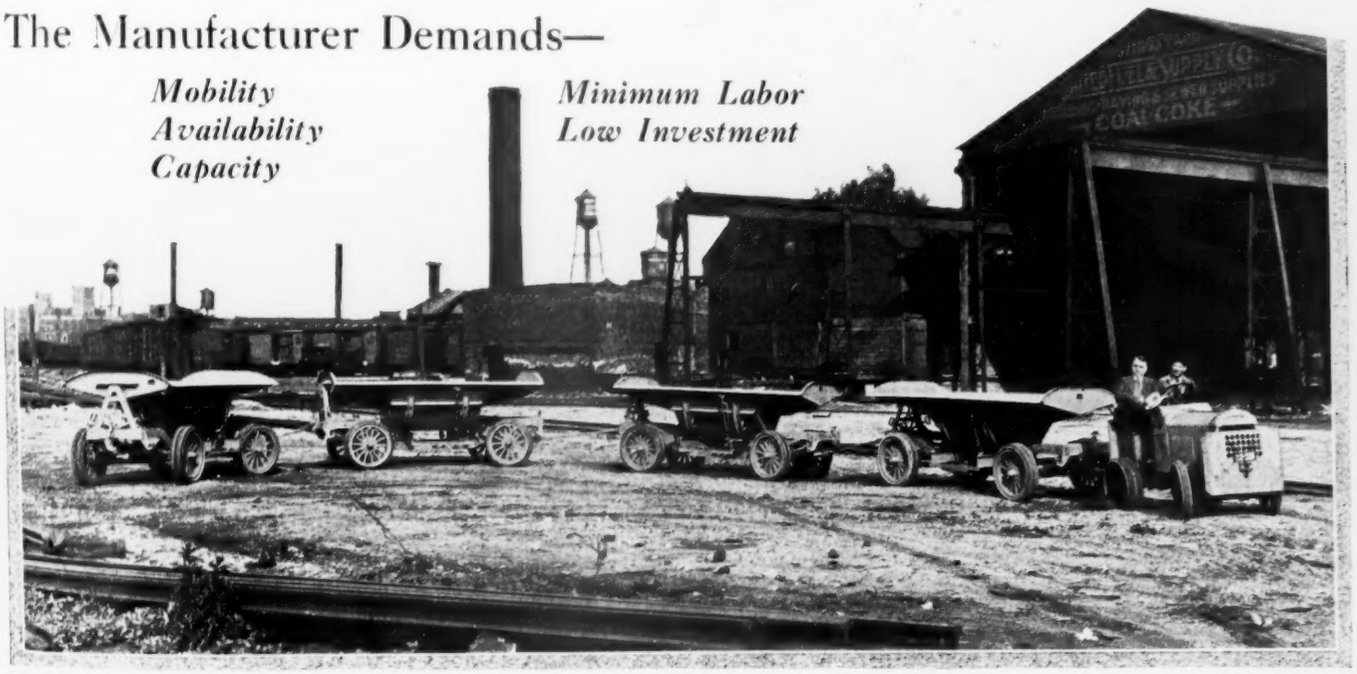
Trailers the Solution

The writer has particularly in mind a large corporation with plants in nine cities of the United States, engaged in the manufacture of chemicals on an enormous scale. Faced by the problems presented above, this corporation has found that industrial trailers and tractors answer these requirements most satisfactorily. For the past eight years the organization has used for its intra-plant hauling four-wheel trailers and Fordson tractors.

Previous to the introduction of these fleets, the disposal of broken brick and waste materials from coke ovens was handled by horses and carts or by men with wheel-barrows. A possible alternative to this method was the use of the numerous railroad tracks and sidings in the yard, but these were not always convenient when intra-plant distribution demanded transportation of construction materials to various points inside the factory buildings. Cars had to be loaded and the operation called for the use of laborers with wheel-barrows. Labor costs loomed large, considering the value of the work. The horse method was unsatisfactory because the time element, which always appears under one form or another as a loss, was excessive, and for the added reason that the weight and bulk capacities were limited.

Following an investigation of the performance of trailers and tractors, the company bought a trial fleet and instituted a dispatching system under the

(Continued on page 50)

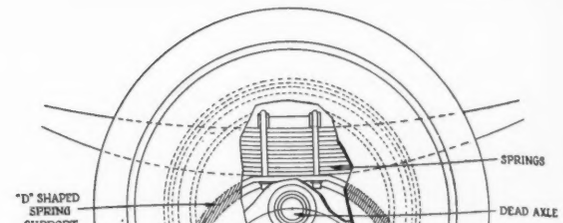


A Fordson tractor and four-wheel trailers solved this company's inter-plant hauling problem

* Manager Detroit Trailer and Machine Company.

The Commerce Relay Drive Truck

By Leslie S. Gillette



Mechanical sketch, showing assembly through two sections.

BY applying a new principle to rotate the rear wheels, the latest Commerce Relay Drive 3½-ton trucks are said to have improved their performance and field of utility by a margin of over 100 per cent. To achieve this, the weight of the truck and its load are employed advantageously to assist in rolling the rear wheels, thus gravity is used to help maintain the momentum of the truck while under way, to assist in starting, or overcoming obstacles or holes, and to provide additional traction when the truck is in soft ground.

At present, forty-eight Relay Drive 3½-ton trucks are being built at the Commerce Motor Truck Co.'s plant at Ypsilanti, Mich., and it is planned to incorporate these axles in the other sizes of Commerce trucks ranging from 1 ton to 5 tons, also in addition. The new axles will be employed on buses and tractors while the design is applicable also for installation in passenger cars. Relay Drive axles will be used exclusively on Commerce vehicles, A. O. Hamilton and Frank M. Kincaid being responsible for the present development of the axle and truck.

The general principle of the axle in which gravity assists in rolling the wheels may be described as follows: By a gearing arrangement in the rear wheels connected with the engine and a flexible connection between the axle and frame, the chassis is moved forward and upward several inches before the wheels start to roll until a point is reached where the gross weight lifted overbalances. This movement is sufficient to surmount the friction between the tires and the road and to start the wheels rolling. When an obstacle, hole or soft ground is encountered, a greater overbalancing effect is imparted which results in the gross weight plus the momentum of the truck assisting the engine in overcoming the resistance. As the weight moves forward and upward before the rear wheels begin to rotate, it enables the wheels to get better traction as the initial momentum assists the wheel traction.

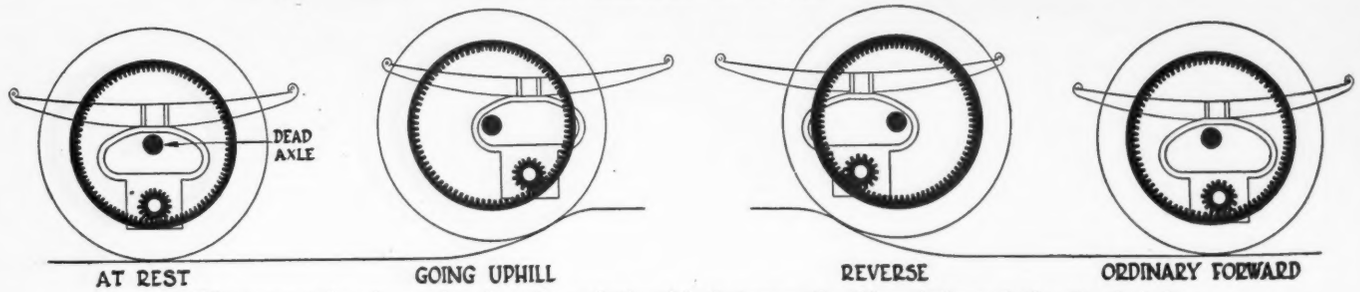
45 m.p.h. With Solids

Speeds over 45 m.p.h. are possible with solid tires over ordinary roads and large obstacles or deep holes can be negotiated without jars to the frame and without change in engine speed. In a demonstration witnessed by the writer, a 10" by 10" timber was placed under the wheels of a Relay Drive truck at rest. When the engine power was applied the truck first moved forward slowly and then the wheels rolled over the timber without any jolts being transmitted to the chassis frame. This operation was repeated several times in both directions with the engine running at a set speed and the low and reverse gears engaged without the use of the clutch or brake. Two other special features of the tests were the ascending of a 40 per cent grade with load and the pulling out of a soft field with all four wheels sunk in up to the axles.

The following illustration may give a better understanding of the underlying principle of the Relay Drive. If a man commences to climb up the spokes of one of the large rear wheels of a farm wagon standing on a smooth road it is obvious that the vehicle will move forward. When the rear wheels come to a large obstruction, or the ground is too soft to provide traction, the wagon will cease to move. To overcome the resistance the man must climb sufficiently far up the spokes until he reaches a point

No. 1. Rear view of Commerce truck, showing Relay Drive Axle in "at rest" position

The manner in which the weight of the truck is taken to the Live Axle through the D-shaped forgings and then transferred to the Dead Axle should be noted. Compare with first illustration of diagram below.



Diagrammatic views showing the relationship between the Live Axle and the Dead Axle

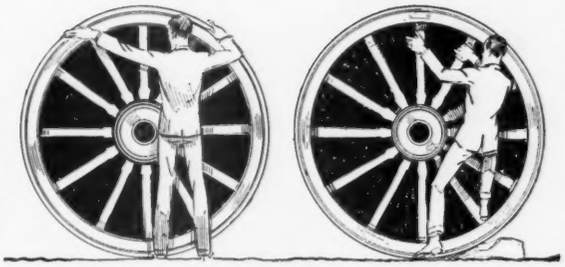
These diagrams are not supposed to be mathematically correct or in absolute proportion, but are given to illustrate the movements involved and the relationship of the units under varying conditions.

where his weight overbalances the wheel and forward motion is resumed.

In the Relay Drive axles there are three major component parts. These are the dead axle which carries the wheels, the live axle which is driven from the propeller shaft in the customary manner and finally the track gear and pinion which transmit the power to the wheels. As can be seen from illustration No. 1, the **rear springs are connected with the lower or live axle housing by special design "D" shaped forgings.** These forgings together with two radius rods positively tie the live axle housing with the chassis. The dead axle at either end is keyed to the center of two circular shaped castings and at 7 in. from the center of these castings, bosses are provided to enable the entire dead axle and castings to swing on bronze bushings from the live axle housing.

When the truck is at rest, the weight of the chassis and load is transmitted through the rear springs to the live axle housing by the "D" shaped forgings. As the circular castings carry the dead axle and the former are supported on the live axle housing, it will be noted that the total weight is transferred to the dead axle and then to the wheels. Provision **is made to allow the live axle to swing 60 deg. on either side of center** as related to the point of tire contact with the road. As the live axle is connected directly with the chassis frame, when power is applied to the live axle making the latter move, the truck will move in conjunction with the movement of the live axle. It should be understood that when the power is first applied to the wheels the truck **will move first before** the rear wheels begin to roll.

The live axles for the final drive are provided with the usual form of differential and driven through the usual method of spiral bevel gearing connected with the propellor shaft. Illustration No. 2 shows the track pinion mounted on the end of the live axle shaft and the bushings carrying the circular casting together with dead axle will be seen immediately behind the pinion. In this illustration, it will be noted that the live axle is at the end of maximum travel in one direction. When the truck is at rest the dead axle center and therefore point of tire contact is immediately above the center axis of the pinion. When the wheels are in position and the gears mesh, the pinion axis **is directly below the dead axle center,** the centers of both shafts being vertically above the point of tire contact with the road when the truck is at rest. Illustration No. 3 shows the position of the axles when the truck is stationary.



Illustrating how the load is carried forward when the wheel strikes an obstruction by applying weight ahead of the axle center

Load Carried Forward

With the truck at rest and power from the engine being applied to the live axles, the drive pinions which have been at their lowest point start climbing up the circular track. As the pinions move they lift the load and carry it forward and continue to do so until the point is reached where the weight of the load acting downwards is sufficient to begin to roll the wheels. It will be seen that the weight is acting downwards ahead of the point where the tire makes contact with the road and this force acts as a lever to assist in moving the wheels.

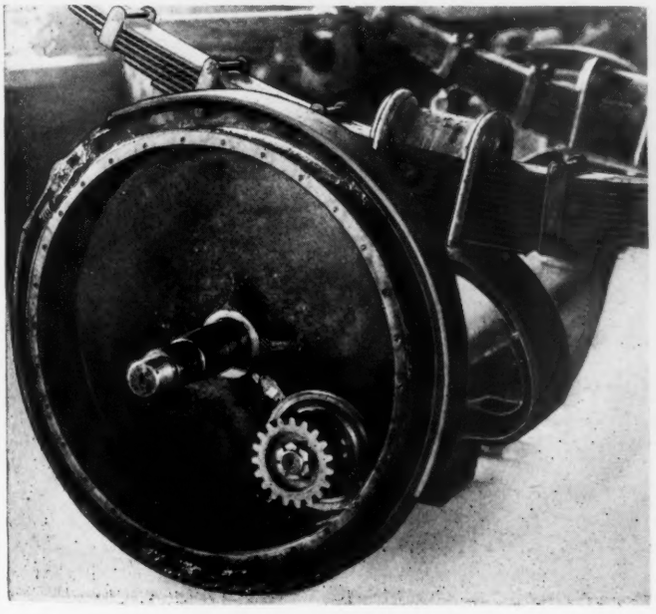
On a smooth level road the load is carried from 5 to 10 deg. ahead of the point where the tires contact with the road.

Inclimbing the circular track the pinions in their highest position can move the truck forward or backward 6¼ in. and during the maximum travel the entire load or rear of the truck is raised 3⅝ in. During the total horizontal movement of 12½ in. and the 3⅝ in. vertical travel, the rear wheels remain stationary of their own accord. From the accompanying pictures it will be seen that there is not an excessive amount of clearance between the live axle housing and the ground. However, the action of the pinions in turning the wheels, especially when an obstacle is encountered, lifts the axle housing and provides an unusual degree of clearance.

As road conditions change due to uneven surfaces and grades, the position of the pinions adjust themselves to follow every irregularity and automatically deliver the turning effort to the rear wheels proportionate to the requirements. It must be understood that the Relay Drive enables energy to be stored between the peaks of road resistance which accounts for the weight assisting the truck when in motion.

The action may be summarized briefly as follows: The pinions continue climbing the circular track until they have taken a part of the load sufficient in amount to cause the wheels to rotate. While the engine is delivering a constant torque to raise the weight of the load, the weight is constantly acting downward in a manner to cause the rear wheels

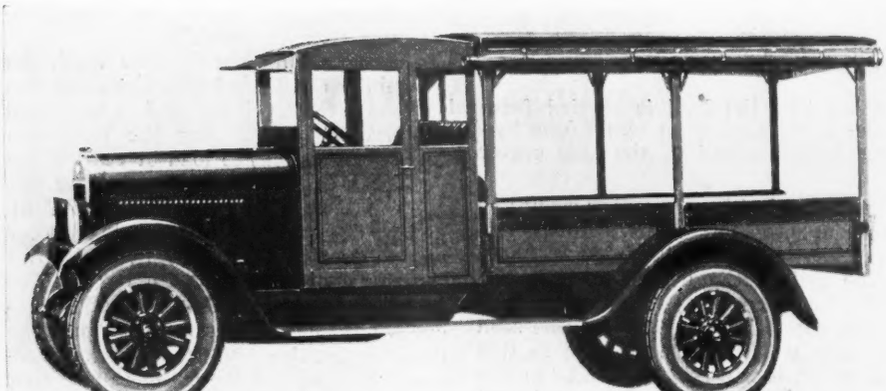
(Continued on page 23)



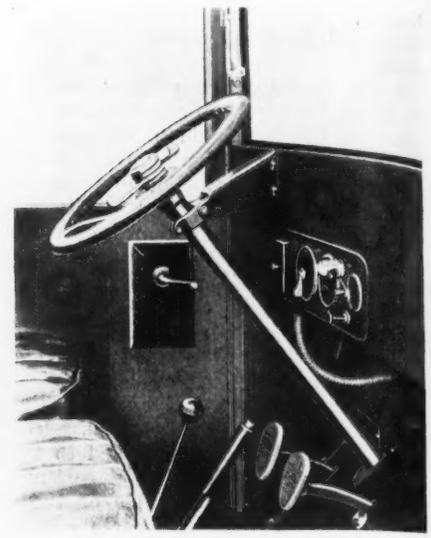
No. 2. Wheel exposing track pinion and dead axle shaft
When the truck is at rest the dead axle center is immediately above the axis of the track pinion. The bushings on which the live axle swings can be seen behind the pinion. The truck gear is riveted to the hub of the wheel

No. 3. Another view, showing D-shaped forging
This connects the chassis with the live axle. As power is applied when an obstruction is encountered the live axle rises, increasing the ground clearance

Reo Makes Changes in Speed Wagon



New Reo Speed Wagon is featured by many new improvements. Note particularly the lowered and improved appearance of body and absence of gas tank



Showing improvement in cab. All instruments are mounted in an oak finished panel

IMPROVEMENT of the steering gear, vacuum feed gasoline system with tank under the driver's seat instead of on the dash, lowering of bodies, and an improved appearance are among the changes made in the 1¼ ton Speed Wagon.

The steering gear is now enclosed in a dirt and grease proof housing and an intermediate gear is used in the assembly. The steering column is adjustable 3 in. in the cab. The steering wheel has been increased in diamter to 18 in. and the spark and throttle controls are mounted above the wheel, similar to passenger car usage. The horn button has been placed in the center of the wheel.

A Stewart vacuum tank is placed on the dash inside the hood just above the steering gear. The tank is of 19 gal. capacity, an increase of 8 gal., and is mounted beneath the driver's seat. The battery is located under the right seat. A gasoline gage is mounted between the seats. Tools are carried in a compartment which is accessible by removing the seat back.

The cabs are provided with one piece windshields, sun visors, and cowl ventilators. All instruments, including the ignition, switch and choke are mounted in an oak finish panel on the instrument board. Windows in the doors are operated by crank-type handles. Two filament type bulbs, of the same design as used in passenger cars, are used in the headlamps.

The express body has been lowered 1½ in. by using reinforcing irons in place of the former wooden sills. Sills have been retained in the platform and stake bodies but they have been lowered 2¼ in. by reducing the cross bunks. The changes in the bodies have been made to facilitate loading.

The appearance of the Speed Wagon has been enhanced by making the hood longer, making the radiator suggestive of passenger car type, changing the front fenders and redesigning the cabs.

The wheelbase of the light Speed Wagon has been increased 2 in. The price of the four and six-cylinder 1¼ ton models have been increased $55, the former now listing at $1090 and the six at $1240. The larger two-ton Speed Wagon has not been changed and the price remains unaltered at $1985.

Graham Bros. Announce New Ton Truck

A NEW one-ton Graham Bros. truck, known as the "G-Boy" is now being delivered to all Dodge Bros. dealers. The new unit, which lists at $885, incorporates several improvements on the "MM" chassis and with the regular 1½ ton models will complete the Graham Bros. line of trucks.

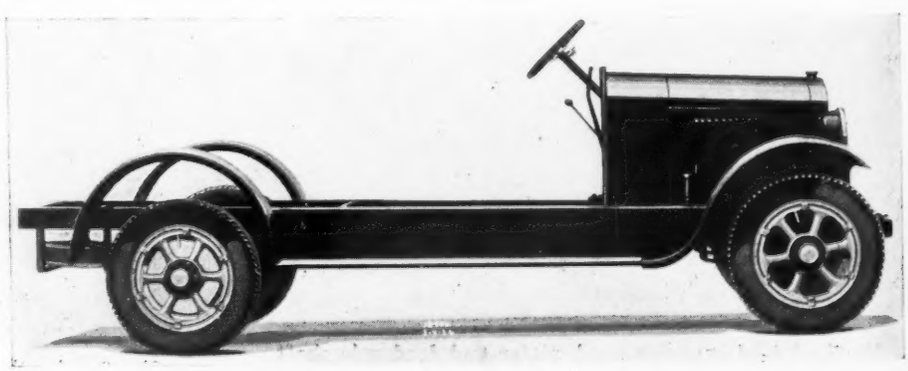
Better balance and equal load distribution have been obtained by moving the front axle location approximately 4 in. forward and rearranging the weights. Better riding qualities, lighter weight, easier handling and more rapid acceleration are the advantages claimed for the new design.

The Dodge Bros. engine with the special heavy type transmission which forms a unit power plant and the front and rear axles are the same as those employed in the other models. The wheelbase is now 128 in. but no change has been made in the loading capacity or size of the driver's compartment.

30 x 5 in. tires are used, mounted on six spoke cast steel wheels and the spare rim is held by a carrier under the frame at the rear. Minor changes have been made in the chassis and springs. Gear ratio of 5.1 to 1 and double internal brakes are retained in the G-Boy design.

Improved assembly facilities and resulting economies in cost of manufacture are responsible for the new low price.

Eight different styles of bodies are offered. Standard equipment of the chassis includes front and rear fenders, full length running boards and shields, front bumper, and tire carrier under rear of frame.



New 1½ ton "G-Boy" latest Graham Bros. model

Mack Enters Gas-Electric Field With New Bus Model

THE use of one electric motor and drive shaft, with Mack double reduction rear axle plus the exclusive features and design of the standard Mack city type bus are features of the new gas-electric job announced by the International Motor Co. Production is confined to 25 and 29 passenger city type buses of 196 and 225 inch wheelbase chassis respectively.

The electric drive units are manufactured by the General Electric Co. and are particularly distinctive in that only one electric motor is used, thus eliminating considerable weight, extra maintenance and costs, and making possible the retention of the standard Mack rear axle and single propeller shaft.

Electrical equipment furnished by the General Electric Co. consists of a generator direct-connected to the engine, a motor coupled to the drive shaft, and a controller or switch to make the required circuits.

The generator is the DT-1105, rated at 125 volts, 200 amperes at 1200 r.p.m. Both ends of the generator are of aluminum alloy, bolted to the engine flywheel housing and forming the front support of the generator. The rear end of the generator is supported by a drop forged cross bracket fitting over a circular projection on the end of the generator. This is a slip-fit so that, while the generator is held securely, allowance is made for chassis distortion on uneven road surfaces. The armature is mounted on a hollow shaft running on ball bearings. It is driven by means of a smaller solid shaft carried within and connected at the rear end through a rubber block flexible coupling. The front end of the solid shaft connects to the engine flywheel through a splined coupling so that removal of the supporting bolts allows the generator to be pulled away from the engine.

The single motor is the GE-1101, rated 125 volts, 140 amperes at 1100 r.p.m. It is of the series type. Both the generator and motor are fan ventilated.

The controller is really only a drum type switch since it is used only to give the proper connections for forward or reverse or for emergency electric braking. The ordinary operation of the bus is entirely by the foot accelerator pedal, and the bus speed is controlled by the engine speed.

The added weight of the gas-electric units over the standard parts which they replace is about 1400 pounds, bringing the weight of the 25 passenger bus to 11,300 pounds and the 29 passenger bus empty to 12,130 lbs.

As the generator occupies the place of the transmission in the gear-drive bus, the hand-brake lever is dispensed with and the right pedal, formerly the service brake, is connected to the emergency brake on the propeller shaft. This propeller-shaft brake operates independently of the service brake which acts on rear wheel drums.

In the gas-electric, the emergency pedal is equipped with a ratchet arrangement so that the brake may be left in the "on" position. The left pedal, formerly the clutch pedal, is used to operate the service brake, equipped with the vacuum booster brake. This change in the service brake from the right to the left foot allows the driver to use both feet to control the bus.

The electric motor is kept below the original flooring but at the same time, due to the chassis construction and mountings of the motor the 9½ inch ground clearance is retained.

The engine is a four-cyilnder unit with demountable head cast in pairs. Cylinder is 4¼ inch bore and five inch stroke, 28.9 hp. The engine, springs and the electrical units are rubber shock insulated.

Commercial Relay Drive

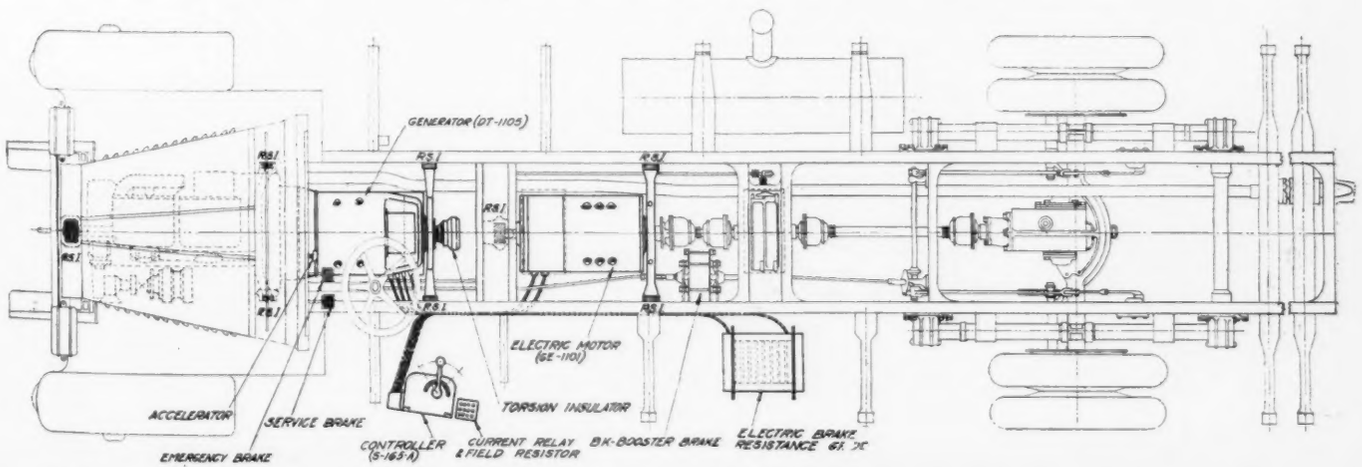
(Continued from page 21)

to rotate. Although additional power is required to overcome the road resistance when an obstacle is encountered, the power delivered by the engine is kept constant. The amount of extra effort required to surmount the obstruction is automatically determined by the size of the obstacle. When an object is encountered the wheels slow down but due to the momentum of the truck, the chassis moves upward and forward through the pinions antomatically following up the circular track. When the weight on the pinions is sufficient to cause a state of overbalance, the wheels move forward and climb over the obstruction. Finally, in overcoming road resistance, the Relay Drive uses the power of the engine, the momentum of the truck and the weight of the load to roll the driving wheels and propel the truck.

Track gears and pinions are of 4½ to 6 pitch with the face of the gears 1⅝ in. The pitch diameter of the larger gear is 18⅝ in. with the track pinion 4¼ in. The former is riveted to the hub of the wheel and made of 2320 S. A. E. steel, while the smaller gear is of 2315 S. A. E. steel. Including the spiral bevel drive to the live axles, there is a total gear reduction of 9.28 to 1. The pinion and track gears are so designed that two teeth are always in mesh which enables the tooth load to be reduced by 50 per cent while ample lubrication is insured by two quarts of lubricant carried in the gear compartments of each wheel. Service brakes are of the double acting external type contracting on 6 in. wide drums on the rear wheels, operation being effected through the Steeldraulic system. Tires on the rear are 40 x 12 in. solids.

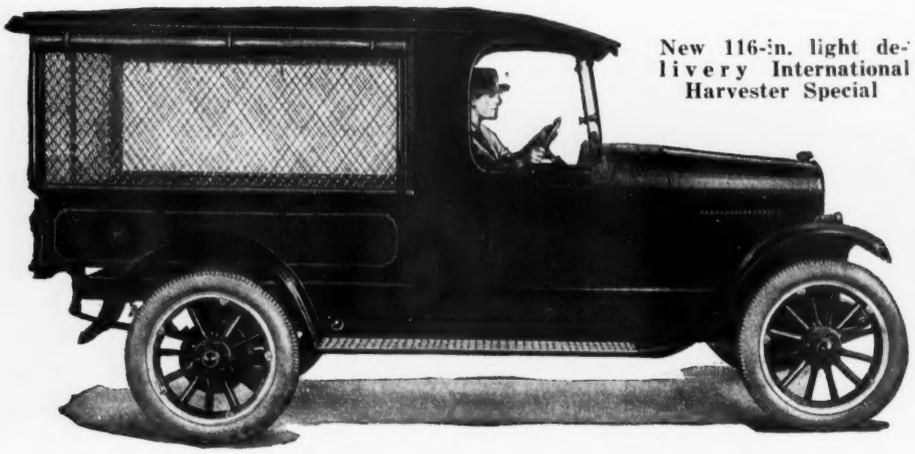
Trolley Loses, Bus Starts

The Freeport-Rockford Motor Bus Company, recently organized, has inaugurated service between the two cities, making four round trips daily. The company succeeds the traction line which has been operating at a loss and which will shortly be abandoned.



Plan view of new Mack gas-electric bus which features single motor drive and standard rear axle and differential

International Harvester Adds Special Delivery



New 116-in. light delivery International Harvester Special

THE International Harvester Company of America has recently announced a light delivery model of less than one ton to its line, called the International Harvester Special Delivery. It is smaller than the present model S one-ton job. The wheelbase is 116 in.

The frame is 4½ in. deep, of 3/16 in. stock, with four cross members. Front springs 40 by 2 in.; rear 53 by 2 in. Tires are cords, 31 by 4 in front, 32 by 4½ rear. Rear axle is a spiral bevel, single reduction.

The engine is a four cylinder, 3½ bore by 4½, Ricardo type head. Total reduction engine to rear axle is 4:45 to 1 on high. Pressure feed lubrication to all main, connection rod and camshaft bearings. Chassis lubrication by Alemite.

The chassis equipment includes front fenders, full length running boards, starter, electric lights, storage battery, speedometer, electric horn and tools. The price of the truck varies from $765 to $895 depending on body.

Special equipment furnished at additional cost includes an enclosed panel body; open express body with three-quarter enclosed cab; express body with full length top, side and rear screens and three-quarter enclosed cab; rear fenders and spare rim. All bodies are built at the Springfield, Ohio, plant of the International Harvester Co.

Getting the Serviceman's Attention

A complete line of service station equipment mounted on a demonstration truck is being employed by J. H. McCullough & Son, jobbers, of Philadelphia, for exhibiting the time and labor-saving features of modern repair machinery to garages and repair shops in their trade area.

The units will be shown in actual operation by E. K. Woodley, former automobile factory branch road man. Demonstration of the machines, doing the prospect's own work, rather than superficial salesmanship will be used to attract the serviceman's attention, gain his interest, and sell him the idea of better maintenance work at less cost resulting from the use of modern equipment.

A Koehler 110 v. D.C. generator supplies power for the units. A limited amount of roadside service to stranded motorists will be possible as "Free Air & Water" are supplied from a compressor and water tank. The chassis is a Pierce-Arrow with a special body built by A. G. Fischer, Inc., of Philadelphia. The shop equipment was installed by the McCullough shop force.

The equipment includes: Black & Decker valve set, Eagle battery charging outfits, Goodell-Pratt bench lathe, Manley crane, Roth constant-potential battery charger, Manley tire inspector, Black & Decker 6 in. and 8 in. bench grinders, two Kellogg air compressors, Manley 40-ton hydraulic press, two B & D drills and stands, Wright ½-ton overhead hoist and trolley, Fleming brake lining machine, four Parker vises 17 lb. to 112 lb., Kellogg high pressure car washer, Goodell-Pratt hand grinder, hydraulic jack, electrical unit service station including armature and other testing equipment, and a large assortment of small hand tools. The body has complete electric light equipment.

Telling the Public About a New Bus Route

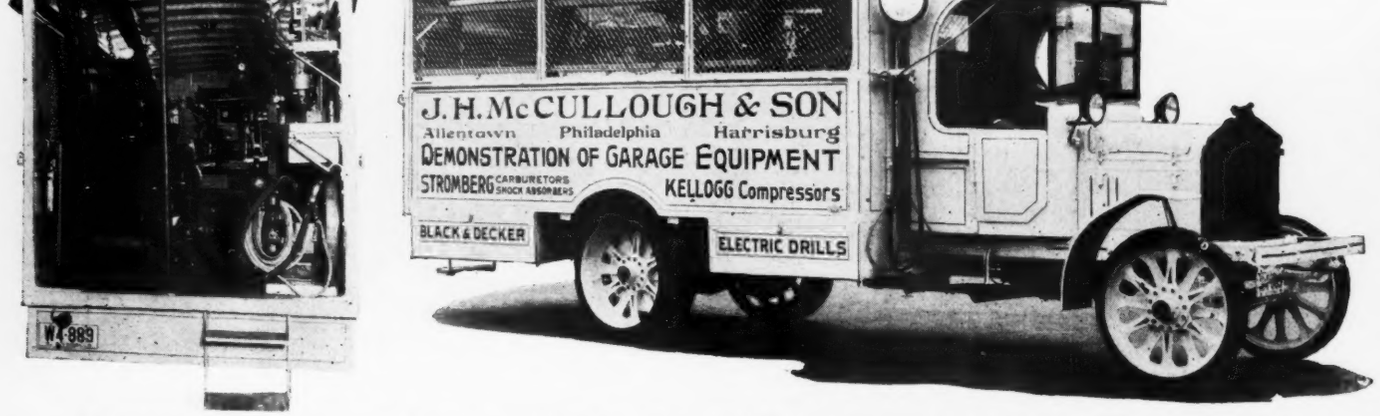
(Continued from page 16)

painted on the sides of the bus in as big and readable letters as possible:

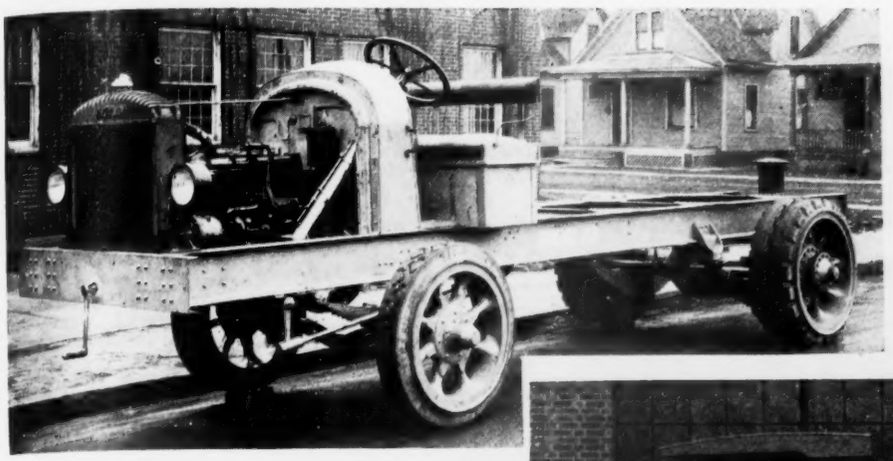
BLACKBURG AND WHITEVILLE
EVERY HOUR ON THE HOUR

In the case of the new Arrow Line between Paterson and New York, publicity brought this run immediate business.

Mr. N. Smith, the manager stated, "From the very start we got business. People were informed about operations. They are so thoroughly advised that even now they are awaiting the arrival of additional buses to begin a twenty minute schedule between New York and Paterson."



Philadelphia Jobber uses specially designed and equipped body to demonstrate shop machinery direct to users



Douglas Models are built for special service

Semi-Trailers Dumped by Elevating Fifth Wheel

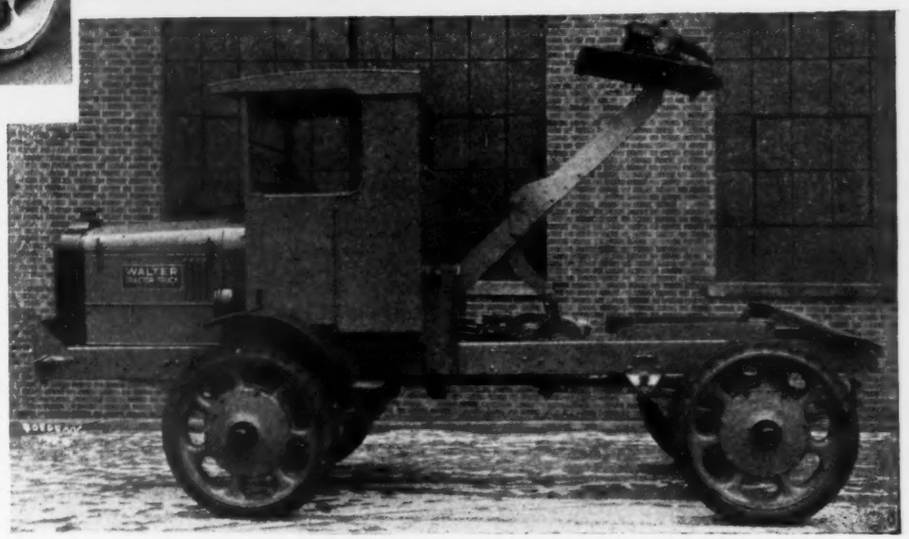
A mechanism for dumping semi-trailers by elevating the fifth wheel has been manufactured by the Walter Motor Truck Co., Inc., Long Island City, N. Y. makers of the Walter Tractor Truck.

The fifth wheel elevating mechanism consists of a A-frame pivoted to the tractor behind the cab. The hoisting device consists of a standard Van Dorn mechanical hoist which raises this A-frame by means of two crank arms and connecting rods. The trailer can be dumped with the tractor at any angle with the trailer body.

The elevating feature can be used with any of the conventional types of semi-trailers with the fifth wheel.

The use of simple semi-trailers, dump type trailers not being required, and the use on one elevating mechanism on the tractor truck instead of a separate elevating outfit on each trailer are among the advantages claimed for the Walter Fifth Wheel Elevating Mechanism by its makers.

In the design of their new Model 53 small bus chassis the engineers of the White Company have included the Bragg-Kliesrath Vacuum Booster Brake as standard equipment.



The Walter elevating fifth wheel dumps semi-trailers

Douglas 7-ton Chassis Built to Order

A special chassis adapted to the mounting of large machines such as cranes is manufactured by the Nebraska Auto & Truck Mfg. Co., Omaha, Nebr.

An unusual feature of the truck is that the radiator and power plant overhang the front axle and the steering drag link is forward of the front axle.

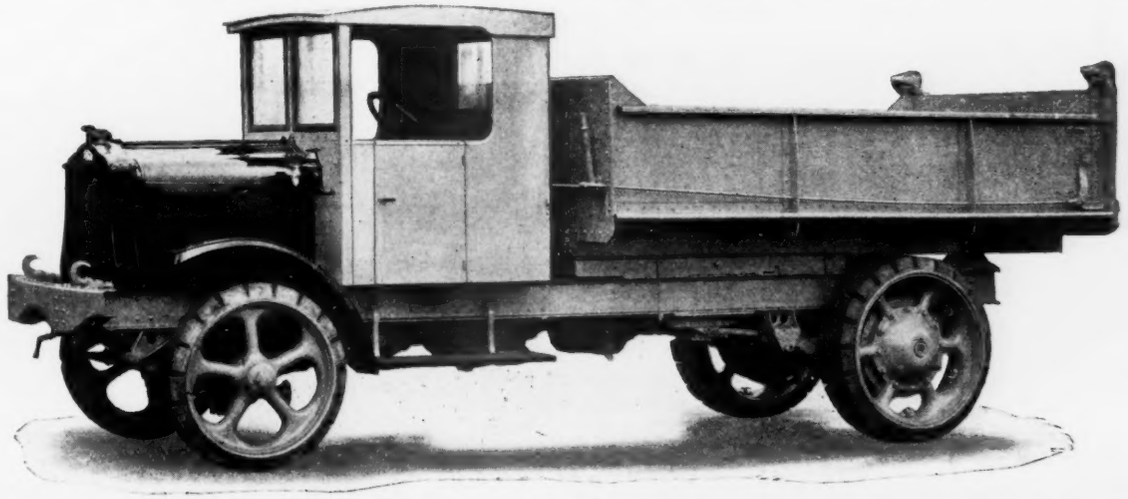
The engine is a BTU Buda, 5 in. x 6½ in. rated at 61 hp. at 1400 r.p.m. Ignition is by Eisemann magneto with impulse starter. Electric starter and lights and battery-distributor ignition can be furnished, when so ordered. The clutch is a Fuller and the transmission is a Fuller 4-speed mounted amidships. Power is transmitted through two Blood Bros. drive shafts with their universals.

The front axle is a Shuler, 3½ in. deep with Timken wheel bearings. The rear axle is a Wisconsin full-floating worm axle. Standard ratio is 11¾ to 1. Both brakes are internal expanding on the rear wheel drums. Air brakes will be furnished if desired. The springs are unusually heavy to care for the 7-ton rated capacity. Front springs are semi-elliptic 3 in. wide by 48 in. long and the rear are semi-elliptic 4 in. wide and 60 in. long.

The steering gear is a Ross type T irreversible with 22 in. wheel.

The frame is made of 10 in. I beam side members with three cross members of similar size. Additional cross ties are placed with particular regard to the special equipment mounted on the frame.

The fuel system has a 30-gal. tank with Stewart vacuum feed. The radiator is a special type with cast frame.



Highland model H. W. White Cab mounted on a model 52D White dump truck. All outside surfaces of the cab including top are metal

for Economical Transportation

CHEVROLET

Modern Design *assures* Low Operating Costs

Chevrolet's modern design is your strongest assurance of dependable delivery at low cost.

When you invest $550 in a Chevrolet one-ton truck chassis you get the strongest truck chassis available today at this low price.

You get special truck type construction—heavy frame, extra-strong rear axle, heavy-leaved springs and over-sized brakes.

You get the greater flexibility of Chevrolet 3-speed transmission—the abundant power of Chevrolet's valve-in-head motor—the easier, safer handling of Chevrolet's semi-reversible steering gear and the greater stability of springs, set parallel to the load.

Only Chevrolet offers you these quality features in a one-ton truck chassis at $550.

1-Ton Truck
(Chassis Only)
$550
f.o.b. Flint, Mich.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
Division of General Motors Corporation

CHEVROLET TRUCKS

ONE TON — HALF TON

World's Largest Builder of Gear-shift Cars

EDITORIALS

Who Sells Them?

A PROMINENT sales manager is quoted as saying that he expected his salesmen to do only one-third of the work necessary to close a sale. The product and the support of the house were credited with the other two-thirds. Naturally, when a deal fell through the discredits were placed in the same proportion.

This practice brings up rather sharply the question of house support, a matter that is too often neglected in truck selling organizations. A salesman is only as good as the house behind him. He has to sell the organization as well as the truck. How well he does that depends on the help he gets from the management.

No matter how small the organization, or how large, the salesman must be backed up by keeping the customer satisfied and his vehicles on the road. Providing prospect leads is not the sole purpose of the inside organization and the salesman should have all the support he needs both before and after the sale.

Ensuring that the customer has a truck on any and every day that he needs it, no longer means a $50,000 stock of parts. If the customer can get the loan of a truck while his own vehicle is being repaired he will usually be as well satisfied as if special efforts were made to get his job out in extra quick time. Some order blanks carry an agreement to furnish, free of charge, a service truck for use in any case where it is impossible to supply the required part in 24 hours. Such an arrangement may cost the company the use of the truck for a couple of days—and he is a lucky sales manager who does not have a number of unsold trades these days—but the saving on investment in parts will save the cost tenfold.

Any sale that does not tie the customer up with the house as strongly as it does with the salesman is a failure from the company's point of view, as has been proved over and over again. So many salesmen take their customers with them when they change their connections, solely because the house support has not been such as would convince the buyer that they were anxious to do everything in their power to give him the utmost value for his money.

Sales must not be personal if the house is to prosper, and that means that the organization must do its share in the early stages and show that it is 100 per cent behind its representatives.

On Tire Pressure

A RECENT piece of publicity released by Miller News Service is bound to hit the average passenger car owner between the eyes. It states that by keeping the air pressure in his tires up to normal he saves about $10 an hour. The idea is that if the average tire user spends about three minutes at a free air station per week to bring the pressure in five tires up to normal, it would amount to about 2½ hours in a year. Estimating the cost of a set of new tires at $125 and figuring that the average tire kept properly inflated will give from 20 to 25 per cent more mileage, the saving will amount to $25 or $10 per hour.

Whether the reader agrees with this method of figuring or not is immaterial but the fact remains that tire pressures are being neglected not alone by the majority of car owners but by truck and bus owners. A recent investigation made on this subject shows that the fleet owner of 25 trucks or buses would be justified in hiring a $7,500 a year man to do nothing else but check up the tires. So important is this matter in commercial service. The enterprising dealer might do well to include a service of this character among his truck and bus customers. Now that the balloon tire is coming into greater use among buses even more attention will be necessary in checking air pressures.

News of the Trade

Unified Design and Equipment Regulations

Preliminary Proposals Prepared by Body Committee of N.A.C.C. to Standardize Rulings

STEPS toward the solution of one of the worst problems of the bus industry—conflicting state regulations affecting body design and equipment—were taken at a meeting of motor coach, body and parts manufacturers held by the National Automobile Chamber of Commerce in Detroit May 6.

The group prepared a preliminary outline of proposed unified regulations, which, after refinement and approval by the manufacturers immediately concerned, will be submitted to a general committee of all associations of the industry, with the ultimate view of obtaining uniform action by state bodies.

As a prelude to this decision, those in attendance at the meeting heard George H. Scragg, of Mack Trucks, Inc., tell of some of the discrepancies and inanities of bus regulation that have made of motor coach body building a custom operation rather than quantity production. It was brought out that the cost of the body, under present conditions, equals that of the chassis, bringing the total cost of the job to an uneconomic figure.

It was brought out that most of the regulations affecting buses were made in the name of safety but without any clear idea of how safety could best be obtained. For instance one state requires that the door of the bus should open inward to prevent passengers from falling out and an equally illustrious commonwealth immediately adjoining says that all doors must open outwards so that fares can get out quickly.

New Jersey says that buses must not be less than 84 in. wide and Florida says they must not be more than 84 in. wide. As most buses are now 90 or 92 in. wide, special jobs must be built for Florida service and these, if on the safe side of the maximum dimensions would run the risk of being barred from New Jersey.

A tendency to restrict width was noted, and this was urged as one of the strongest reasons for unified action. It was held that a set of regulations approved by all the elements interested in bus manufacture, operation and use would carry a great deal of weight with state commissions, and once a few had accepted the code the others would fall in line. The precedent of the work of the Motor Vehicle Conference Committee in extending the application of uniform vehicle laws was cited.

It was proposed to invite to serve on the committee which will consider the preliminary draft of regulations not only the associations of the automotive industry, but also the users' bodies such as the American Automobile Association, the American Electric Railway Association, the American Railway Association and representatives of highway associations and utility commissions.

Those at the Detroit meeting who drafted the preliminary specifications, using the Society of Automotive Engineers specifications as a basis, were A. J. Scaife, White; W. C. Parker, Reo; Burnett, S.A.E.; A. H. Ferrandou, Graham, and Mr. Scragg. This committee will continue its work.

The group also heard a paper by Mr. Parker urging more attention to the proper servicing of buses by fleet owners. It was declared that electric and steam railway users of buses were astonishingly negligent in the matter of preparing for adequate servicing and for the proper choice and training of drivers in the interests of low maintenance costs.

(Continued on page 53)

Coming Events

SHOWS

Chicago, November 8 to 13—Show and convention, Coliseum, direction the Automotive Equipment Ass'n.

Chicago, November 15 to 19—Show and convention, Hotel Sherman, direction National Standard Parts Ass'n.

Cleveland, Ohio, October 4 to 8—Manufacturers' exhibit and 45th annual convention, Cleveland Public Auditorium and Annex, direction American Electric Railway Ass'n, New York City.

Santa Monica, Cal., June 7 to 12—Annual show and convention, direction United States Good Roads Ass'n and the Bankhead National Highway Ass'n.

Wichita, Kansas, February 22 to 25, 1927—Southwest Road Show, direction Wichita Thresher and Tractor Club, Inc.

CONVENTIONS

American Electric Railway Association—45th annual convention and manufacturers' exhibit, October 4 to 8, Cleveland Public Auditorium and Annex, Cleveland, Ohio.

Automobile Body Builders Association—Convention and exhibition June 8 to 10, Hotel Statler, Detroit.

Automotive Equipment Association—Summer convention, June 14 to 19, Mount Royal Hotel, Montreal, Canada.

Automotive Equipment Association—Convention and show, November 8 to 13, Coliseum, Chicago.

National Automobile Chamber of Commerce—Factory service managers' meeting, June 15 and 16, Book-Cadillac Hotel, Detroit.

National Standard Parts Association—Convention and show, November 15 to 19, Hotel Sherman, Chicago.

National Tire Dealers' Association, Inc.—Annual convention, November 16 to 18, Memphis, Tenn.

United States Good Roads Association and the **Bankhead National Highway Association**—Annual convention and show, June 7 to 12, Santa Monica, Cal.

S. A. E.

Boston, Mass., November 16 to 18—National transportation and service meeting.

French Lick Springs, Ind., June 1 to 4—Summer meeting.

S.A.E. Semi-Annual Meeting June 1st to 4th

Exhibits, Demonstrations, Motion Pictures Will Foreshadow Future Improvements

FRENCH LICK SPRINGS, Ind., will be the scene of action for the Summer meeting of the Society of Automotive Engineers. Latest reports indicate that this year's meeting will be the most interesting and largely attended of any ever held. Those who have not yet sent in their reservations are advised to do so promptly.

Exhibits, demonstrations, motion pictures and hundreds of lantern slides to be presented at the technical sessions of the meeting will foreshadow coming changes and improvements to be made in motor trucks, motor coaches, automobiles and airplanes during the next few years. Among the subjects to be discussed by recognized authorities in their respective fields are the engineering features of the racing cars that participate in the Indianapolis race, riding qualities of automobiles, and headlighting; reports of the latest findings of several government bureaus on anti-freeze solutions, motor fuels, road impacts and crankcase oil dilution; two-cycle heavy-oil engines, engine testing methods, new hypoid and worm driving gears for passenger cars, the latest developments in tires and drop-center rims, and the relation of engineering to business.

The 500-mile international sweepstakes automobile race on the Indianapolis motor speedway on May 31, a dinner to be given to visiting members of the society by the Indiana section at the Indianapolis Athletic Club the evening before the race, an aerial photograph of the members formed into the letters S A E on the hotel lawn at the famous health resort, to be taken and developed in the air and dropped by parachute from an Army Air Service airplane from McCook Field at Dayton, will supplement the usual attractions of the program of outdoor sports events and the technical sessions.

Charles M. Schwab, Arthur Brisbane and C. F. Kettering are to be the noted speakers at the Indianapolis dinner. Their talks are to be supplemented with several new entertainment features arranged by the dinner and entertainment committees, of which George T. Briggs and Lon R. Smith, of Indianapolis, are chairmen.

Retail sales of Graham Brothers trucks from Jan. 2 to April 3 were 6085 units, a gain of 2704.

Service Equipment Sections at National Shows

Modern Maintenance Equipment Will be Demonstrated. Sales Development Plan also Announced

ACCORDING to plans worked out by the Service Equipment Committee of the Motor and Accessory Manufacturers Association, it is proposed to demonstrate modern automotive maintenance equipment and methods before separate audiences of the trade and the public at the National Automobile Shows.

The Service Equipment Committee of the M. & A. M. A. is composed of R. W. Proctor, Black & Decker Manufacturing Company, chairman; Fred G. Wacker, Automotive Maintenance Machinery Co.; H. M. Smith, Manley Mfg. Co.; Martin E. Goldman, Forest Electric Co., and B. M. Asch, Asch & Co. The committee recently held an all-day session with M. L. Heminway, general manager, and Neal G. Adair, Show and Educational Department manager, at the association's headquarters. The committee is working on the show plans on behalf of the M. & A. M. A. membership and at the request of S. A. Miles.

The exhibits will be grouped in both the New York and Chicago shows instead of being placed with the parts and accessory exhibits as formerly.

This arrangement will permit operating demonstrations of service equipment, which in some cases could not be conducted along with exhibits of other products because of noise and more than ordinarily large spaces which would be necessary. It is also proposed to admit only the trade to the service equipment sections during the early hours of the day so that public crowding will not interfere with the demonstrations. In the evening the special sections will be thrown open to the public so as to impress upon motorists the importance of adequate equipment in the shops which they patronize. It is also proposed to work out a system under which New York and Chicago and vicinity wholesalers of service equipment will be able to cooperate with the exhibiting manufacturers. Service meetings with nationally prominent speakers will probably be arranged.

Along with the show management and the service equipment manufacturers, arrangements are being made by the Service Managers' Division of the N. A. C. C. to cooperate with the exhibits. The division has already taken a hand through the activity of its chairman, W. M. Warner, service manager of Cadillac, and H. R. Cobleigh, service secretary of the N. A. C. C., who will further organize the cooperation of the division.

The plan for separate service equipment sections in the national shows has been heartily approved by parts and accessory manufacturers, who anticipate increased trade interest in their exhibits as a result of the special promotion work which will be done to bring wholesalers, retailers and service men to the shows to see the service equipment demonstrations.

The M. & A. M. A. will assign space to its members in the service equipment sections as well as the parts and accessory divisions of the shows, continuing its arrangement of many years standing with the N. A. C. C.

Sales Development

The new Sales Development department just announced by M. L. Heminway has already begun work to assist manufacturers in the profitable distribution of their products.

The appointment of a Sales Development Committee and sub-committees has been made by H. L. Horning, president of the Waukesha Motor Company, and president of the M. & A. M. A. The new service will take over the work of the Show and Educational Departments and will be in charge of Neal G. Adair, who has headed these two departments for the past two years.

The Sales Development Committee, which will have general supervision over the work, is headed by L. A. Safford, vice-president of the McQuay-Norris Manufacturing Co., and a member of the Board of Directors of the Association. His fellow members are M. A. Moynihan, Gemmer Mfg. Co.; W. S. Isherwood, A C Spark Plug Co.; A. H. Bartsch, American Bosch Magneto Corp., and R. W. Procter, Black & Decker Mfg. Co.

The Sub-committees are made up as follows:

SERVICE PARTS COMMITTEE—
L. A. Safford, McQuay-Norris Mfg. Co., Chairman.
D. W. Rodger, Federal Mogul Corp.
W. E. McIlroy, S K F Industries
W. H. Hancock, McCord Radiator & Mfg. Co.
B. R. Winborn, Detroit Steel Products Co.

ACCESSORIES COMMITTEE—
W. S. Isherwood, A C Spark Plug Co., Chairman.
A. H. Bartsch, American Bosch Magneto Corp.
O. R. McDonald, American Chain Co.
A. G. Underwood, A. Schrader's Son, Inc.
C. A. Pipenhagen, Pines Winterfront Co.

SERVICE EQUIPMENT COMMITTEE—
R. W. Procter, Black & Decker Mfg. Co., Chairman.
M. E. Goldman, Forest Electric Co.
H. M. Smith, Manley Mfg. Co.
F. G. Wacker, Automotive Maintenance Machinery Co.
B. M. Asch, Asch & Co.

The Department will carry on the various information services which have been conducted by the Educational Department, including the M. & A. M. A. Business Bulletin.

U. S. Court Upholds State Regulation

The Oregon State Highway Commission has the right to regulate the operation of trucks and the capacity loads which may be carried according to decision of the Federal Court at Salem, Oregon. A suit filed by a group of truck operators, seeking to set aside an order of the commission regulating capacity loads to be carried over Columbia River Highway, brought about the ruling.

S. E. D. to Conduct a Follow-Through Campaign

Manufacturers of Electric Trucks, Batteries and Accessories to Cooperate in Extending Sales

TO develop the electric truck market the Society for Electrical Development, 522 Fifth Avenue, New York City, composed of 13 manufacturers of electric street trucks, storage batteries and accessories, is this year conducting a follow-through campaign to extend sales and improve service.

From the 26 cities listed as offering the best markets the society is compiling a report on sales representation, service facilities and other details of manufacturers' efforts to develop the market. Efforts are being made to organize an electric truck club in each city having sales representation and organizations of all department heads using or supervising electric trucks are also being formed.

The central station in each city is asked to do specific things in market development and in turn the manufacturers promise definite services to the stations and the society conducts the national promotion. This program is in charge of a committee consisting of: C. A. Ward, Ward Motor Vehicle Co., chairman; G. A. Freeman, Walker Vehicle Co.; E. R. Whitney, Commercial Truck Co.; W. Van C. Brandt, Electric Storage Battery Co.; K. B. Jones, General Electric Co., and Raymond Zindle, S. E. D., secretary.

The other companies taking part are: The Autocar Co., Steinmetz Electric Motor Car Corp., Edison Storage Battery Co., Philadelphia Storage Battery Co., Albert & J. M. Anderson Mfg. Co., Electric Products Co., Sangamo Electric Co. and Westinghouse Electric & Manufacturing Co.

Kelly-Springfield Truck and Bus is New Firm Name

Officers of the American Bus & Truck Co., Inc., at a meeting here recently voted to change the name to that of Kelly-Springfield Truck & Bus Corp. This decision was reached after a survey was made and realization that the Kelly truck has a splendid reputation.

E. T. Herbig, sales manager of the Kelly-Springfield Truck & Bus Corp., is touring eastern points to meet branch managers and dealers.

Direct factory branches have been opened in San Francisco and Oakland by the Fageol Motors Co., of California, recently merged with the American Car & Foundry Co.

W. A. Knucky is in charge of the San Francisco branch and T. L. Baumgartner of Oakland. A large part of the stock of parts in the Fageol factory in Oakland will be transferred to the two branches, according to J. H. Fort, general sales manager of the Fageol plant.

National Transportation and Service Meeting

Motor Truck and Bus Operation and Maintenance to Feature Three-Day Meeting of S.A.E. in Boston

A THREE-DAY national automotive transportation and service meeting will be held in Boston on Nov. 16, 17 and 18 by the Society of Automotive Engineers. Members of all societies and associations interested are to be invited to attend the technical sesions and a banquet to be held on one of the evenings.

There will be technical sessions in the forenoon and afternoon. On the second day an inspection trip will be made to the maintenance plant of a prominent local fleet operator. The technical sessions will be devoted to discussion of problems of design, engineering, operation and maintenance of trucks and motor coaches, and addresses will be made by recognized experts on the subjects of the coordination of motor coach systems and railroads; freight handling and store-door delivery by automotive equipment; the handling of goods in interchangeable containers; the cost of operating gasoline-electric vehicles; the brake requirements of trucks and coaches, maintenance tools, and the relation of design to the power characteristics of the engine.

N. S. P. A. Arranges Credit Service

N. S. P. A. headquarters have just perfected arrangements with the National Credit Office operating Credographic Bureau at Cleveland, Ohio, to furnish a comprehensive credit service to Association members.

E. P. Chalfant, executive vice-president of the N. S. P. A., states, "This arrangement will bring to the members at reduced cost a credit service built for the replacement parts industry. The Bureau will operate as the Credit Department of the association, and will be in a position to supply up-to-date information in printed form every month covering inventory carried, annual sales, credit classification, number reporting and amounts past due and how long.

In addition there will be issued weekly lists of special reports written, copies of which may be obtained by subscribers on request, and the nature of these reports is such as will present a very clear picture of the credit condition existing. If a report is required on anyone not appearing on these weekly lists a twenty-four hour service is assured."

New Mack Branches

A direct factory branch for the distribution and service of Mack trucks and buses is to be established immediately in Sacramento, California, according to announcement by the Mack-International Motor Truck Company offices. A building has been leased in Sacramento and W. V. Morgan, who has been in the San Francisco sales department for some years, has been appointed manager of the new branch.

A new territorial branch sales and service headquarters will soon be erected in Milwaukee, at an estimated cost of $225,000. Contracts have been awarded for the new building which will be located at the corner of Highway Place and Grand Ave. Present leased quarters are at 4399 Prospect Ave.

More Space Added to N.S.P.A. Exhibit

In 1926 National Standard Parts Association convention and show will be held November 15 to 19, inclusive, in the Hotel Sherman, Chicago, according to an official announcement made at the office of E. P. Chalfant, executive vice-president of the association.

C. W. Moffett, president of the association and chairman of the show committee, said:

"Plans are under way to make the 1926 show a landmark in the history of the replacement parts industry. More exhibition space has been provided than heretofore and it is confidently anticipated that all manufacturer members will show representative exhibits of their lines. Non-member jobbers and foreign distributors visiting this country will be invited and no stone will be left unturned to make this a successful undertaking. Only those manufacturers belong to the N. S. P. A. can exhibit."

For the second day of the convention and show, Tuesday, Nov. 16, a banquet is planned which will be a truly social get-together of members and guests and their ladies. Speeches and business discussions will not be on the program.

Parts and Accessory Business Continues at Healthy Pace

PARTS and accessory manufacturers report business continuing at levels far above those prevailing a year ago, according to the Motor & Accessory Manufacturers Association. While April deliveries to car and truck manufacturers have been curtailed considerably, in line with reduced schedules of many motor vehicle factories, business through the wholesale and retail trade is going forward on a basis virtually even with that of March.

March shipments to the trade of replacement parts stood at an index figure of 146, accessories at 167 and service station equipment at 205. March service equipment business was the greatest for any month in the history of the industry, testifying to the success of intensified educational efforts during the past year for development of scientific service as a basis for automobile sales.

Railroad and Motor Vehicle Not Rivals

V. Pres. Lee of P. R. R. Urges Coordination of Rail and Motors Rather than Competition

"THE future of the railroad is not menaced by the motor car industry as each has its own field," said Vice-president Elisha Lee, of the Pennsylvania Railroad, speaking in the final Aldred lecture to the seniors of the Massachusetts Institute of Technology. "The real problem of the two types of transportation is one of coordination rather than competition, for there is business enough for both."

He stated that he believes that the demand is so great that both will finally become specialists in their individual lines. The railroad is at present transporting practically all of the long-distance mass loads and will continue to be unexcelled in this line, he stated, while the shorter, lighter loads will be taken care of by motor vehicles.

GMC to Show Full Line at Atlantic City

The first permanent exhibit of all General Motors Corp.'s products to be displayed under one roof will be opened in July on the Atlantic City Steel Pier.

Floor space covering 22,000 square feet will house exhibits of the Chevrolet, Pontiac, Oakland, Oldsmobile, Buick, Cadillac, GMC truck, Frigidaire, electric refrigeration product of the Delco-Light division, Delco farm lighting and power plants, Yellow Truck & Coach and Fisher body products, and various G. M. parts and accessories.

The exhibit will be illuminated by an animated sign 65 feet long and a fixed electric sign 290 feet long.

Texas Motor Freight Lines Offer Claim Loss Bonds

Motor freight lines in Texas have won their first fight for recognition as common carriers, from commercial associations, organizations which have been clinging to the idea that railroads are the only common carriers, despite the fact the motor bus and freight lines are multiplying rapidly in the state. Chambers of Commerce in the larger cities have called conference between truck operators and shippers with a view of working out some agreeable plan for adjusting freight transportation.

The Southern Transportation Lines, Inc., the largest motor freight line in the South, operating several lines out of Dallas and other larger Texas cities, announced it would give bonds and carry insurance, both to be deposited in banks, for the protection of its shippers.

The big bus line operators, handling passengers exclusively, have been carrying insurance for protection of passengers for some time.

New England Bus Timetable

Controls 125 Buses Over a 1000-Mile Area

The extent to which railroads have become committed to the auxiliary use of buses is illustrated by the fact that the New England Transportation Co., a subsidiary of the New York, New Haven & Hartford R. R., has issued a timetable covering the operation of 125 buses over nearly 1000 miles of area.

This timetable, which became effective recently is similar to ordinary railroad timetables.

Buses are used by the N. Y., N. H. & H. R. R. as substitutes for branch line trains. They are also used extensively as paralleling present railroad service. The addresses of 20 bus terminals are given in the timetable, together with the schedules of five affiliated motor coach companies.

A. P. Russell is president of the New England Transportation Co.; F. S. Hobbs, manager, and H. Price, traffic manager.

Phone Helps Truck Dealer Reach Prospects

A truck sales agency in Atlanta, Ga. has used the long distance phone with success to secure advance information about prospects and place its salesmen in a better position to make sales.

On hearing of a prospect in a distant city the agent calls the prospect and inquires as to the needs for additional equipment, its proposed use and probable date of purchase. The salesman, armed with this information, calls with the proper size and type of truck for the prospect's use and makes a demonstration. The agent reports the phone plan a success in reducing the number of calls for each sale made.

Budd to Make Bodies in Germany

The Edward G. Budd Manufacturing Company, of Philadelphia and Detroit, has announced its entrance into the automotive field in Germany. A new company has been formed, with the cooperation of German interests, which is known as the Ambi-Budd Presswerke, G. m. b. H., of Berlin.

The German-American firm will manufacture all-steel bodies and difficult steel stampings in Berlin.

North East Plant Additions

Floor space of the North East Electric Co. of Rochester, N. Y., has been increased to over 600,000 sq. ft. The erection of a new 6-story addition to the company's property on Lyell Ave., adds 80,000 sq. ft. of floor space and is already being used for general manufacturing purposes. Sixty thousand sq. ft. have also been gained by the leasing of a 5-story building formerly occupied by the Van Bergh Silver Plate Co. This building, known as Plant No. 4 is situated on the corner of Broad and Main Streets and is but a short distance from the main plant.

Next M.T.I. Meeting at Syracuse May 19 and 20

The board of directors of Motor Truck Industries, Inc., have accepted the invitation of the Brown-Lipe Gear Company, of Syracuse, N. Y., to hold the monthly meeting at Syracuse. Headquarters will be at the Hotel Syracuse. The master committee meeting, to which all members are invited, will hold its session on the evening of the 19th, immediately following a six o'clock dinner at the Hotel Syracuse. The following morning local plants will be visited, followed by a business session in the afternoon.

South Bend Railway Adds to Bus Facilities

Transportation service into sections of South Bend, Ind., which heretofore have had no regular transport of any kind has been provided by the Chicago, South Bend and Northern Indiana Railroad Company by the purchase of five new 21-passenger street car type Studebaker buses.

The whole southwestern part of the city has been without service because of the cost of carrying the trolley tracks across the New York Central tracks, which are soon to be elevated. A section of the southeastern part of the city has also been without service, although it has developed recently as one of the best residential neighborhoods.

Truck Output Passes First Quarter of '25

PRODUCTION of trucks and buses for the first quarter of this year exceeded that of the same period of last year by 16 per cent. Actual figures for 1926 show an output of 125,088 units compared with 107,649 for the first quarter of 1925.

Sales for replacement of units manufactured shortly after the war, when production assumed large proportions, is an important factor in the greater output of the factories.

Healthy business conditions, continued extension of good roads and the replacement field are factors which are expected to keep the production for the second quarter substantially above the figures for the second three months of 1925.

Electric Unit as Business Barometer

Electrical Energy in Proportion to Work Done

The use of the kilowatt hour consumption of electrical energy as a new barometer of business conditions is proposed by Arthur Williams, vice-president, commercial relations of The New York Edison Company.

Pointing out that the electrical energy consumed in industry is directly in proportion to the amount of work being done, that 75 per cent of all the power used in industry is now supplied by the light and power companies, and that even in the home the consumption of electricity reflects variations in the prosperity of the home owner, Mr. Williams predicted that the kilowatt hour would be accepted as one of the most reliable barometers of commercial and industrial activity.

Illinois Bus System Has Rapid Growth

Approximately one hundred motor bus companies have developed a motor bus system in Illinois by operating nearly 1000 buses, covering more than 2000 miles of the new hard roads within the past 12 years. The first certificates were issued in 1914 but progress was slow, and, up to 1922, but eighteen permits were issued. To date, more than 200 permits have been issued, but a large number of these lines went out of business for various reasons, leaving approximately one hundred which are well organized at the present time. Ninety per cent of the lines are operating motor buses only, while the remainder are also handling freight.

Electric Trucks Save Money for Express Co.

Saving $96,000 worth of floor space by replacing 168 wagons and 300 horses with 84 electric trucks was accomplished by the American Railway Express Co., according to a report made at the sixth annual electric truck show held in the building of the New York Edison Co., New York City recently.

Cutting down of traffic congestion by substituting electric vehicles for horse-drawn trucks was shown graphically on a chart.

A milkman using an electric truck requires as an average 44 seconds and 145 ft. of walking for each delivery as compared with 50 second and 350 ft. of walking when using horse and wagon, according to report of stop-watch tests made by Arthur Williams, vice-president Commercial Relations of the New York Edison Co.

Fred J. Rolston Says:

"A Real Salesman Needs No Inducement"

Mr. Rolston takes exception to the selling principle contained in article "The Hundred Dollar Salesman," which appeared in a recent issue

To the Editor Commercial Car Journal:

I do not agree with the viewpoint expressed in your editorial under the heading, "The Hundred Dollar Salesman." I believe it will harm the trade to prevent some salesmen from entering the business of motor truck selling, because they may be now, or have been in the habit of selling an article at "$100 or less."

If a man has become a salesman either by natural instinct, by the road of experience, or by determination and training; that man can make a success of selling motor trucks, or other high price articles provided he plays the game honestly with himself and the opportunity. He must adapt himself to the new conditions just as he has to adapt himself to meet the different characters of his prospective buyers; the discourteous and the courteous, the quick and the slow, the one that is influenced by the personality of the salesman and the one that wants value alone. We practically meet the same conditions whether we are selling the "$100 or less" or the $5000 article. Yes, a real salesman will picture himself a success, become the success and expect his due rewards in earnings.

Pure Salesmanship

I was on the road selling for a candy manufacturer, later for a wholesale grocer, and then operated a retail grocery; finally I jumped into the automobile business, and will not take my hat off to any truck salesman that I have met. Another, who was on the road the same time as myself, selling hams and bacons is now western manager for Swift & Co. Another, selling oil-stoves, has built for himself a fine brokerage business after making a successful motor salesman. These men would have been an acquisition to any motor truck sales force.

The defense of the "$100 or less" salesman brings out my idea of what attributes are the fundamental requisites of a successful motor truck salesman. Ideas that have been learned from actual experience and observation and not from theoretical study. Ambition, determination, knowledge of self, article handled, and human nature, and honesty to one's self, to the firm and to the buyer; given these qualities a man will make a successful salesman. Let us examine these:

First. Ambition: Without this he will be an order taker, a collector of his salary, a machine living day by day awaiting the end. Ambition will stir the soul within him to higher fields, higher objectives, better workmanship, bigger production, better satisfaction, and the top. "Without vision the people perish" must have been written by a successful salesman.

Second. Determination: A man may have all the ambition in the world but lacking determination he will be a failure. It is not easy sailing on the sea of salesmanship. Many, many obstacles must be continually overcome by the salesman; long trade-ins, special discounts, secret commissions, misrepresentation of your products, of your service and of yourself; loss of orders that he counted on as "sure-sales," the commission on which he had spent.

Finally Knowledge

Third. Knowledge: Ambition and determination will force the salesman to develop his knowledge. When he loses his first sale, it will make him stop and wonder where he fell down; was there something wrong with his approach, with his sales talk, did he try and rush the deal, did he let the logical losing time pass, did he run himself out of sales talk at the first interview? Thus he will be forced to study himself. The real salesman improves with experience.

His first "hot sale" will teach him that he must know his product. Most buyers today are soon informed of the points of construction of the different trucks by other salesmen; so he is forced to defend and compare motor truck construction,

(Continued on page 53)

Personals

Nelson R. Brownyer, chief engineer of the Gotfredson Corp., has resigned to accept a position as motor coach engineer for the Kelly Springfield Truck & Bus Corp.

Howard R. Bucher, traffic manager of the Lycoming Mfg. Co., died recently.

Charles Clifton, Walter P. Cooke, G. M. Dahl, Joseph D. Dudley, Myron E. Forbes, Lewis G. Harriman, John C. Jay, J. H. McNulty, Roland L. O'Brian, George F. Rand, C. J. Schmidlapp, Albert D. Sikes, Albert Strauss and **Lester Watson** were re-elected to the board of directors of the Pierce-Arrow Motor Car Company.

Arthur F. Dense succeeds John R. Walton as factory superintendent of the Lycoming Manufacturing Company.

Herman Deuster, manager of the traffic department and **C. C. Hall,** show manager of the Motor & Accessory Manufacturers Association have recently resigned. The first named is in charge of the traffic department of Briggs Mfg. Co. and the latter is connected with the sales division of Fred J. French Co.

H. B. Gay, sales manager of the Electric Storage Battery Co., has been appointed vice-president.

Fred A. Koester, of Los Angeles, Cal., has been appointed representative for the Hell Company in Southern California.

W. B. Minch of Jaxson Steel Products Co. was recently elected president of the Tire & Rim Association of America. **B. Darrow** of the Goodyear Tire & Rubber Co. was elected vice-president. The following were re-elected: **C. E. Bonnett,** secretary; **H. W. Kranz,** treasurer; **H. W. Day,** assistant secretary; **M. E. Clark,** general counsel.

Arthur E. Nafe, head of the service division of Dodge Brothers, has been appointed manager of the National Business Sales Division. He is suceeded by **Henry M. Wiegand. F. R. Valpey,** former sales manager of Graham Bros., has been appointe director of the Commercial Car and Truck Division. **R. W. Baskett,** who has been in charge of district offices for Graham Bros., has been appointed supervisor of district offices and district personnel. **C. J. Schwab,** formerly Graham Bros. district representative in Boston, has been appointed assistant to vice-president and general sales manager. **E. S. Van Dalson,** formerly assistant superintendent of Dodge Bros. Forge & Foundry Dept., has been appointed factory manager.

George H. Ralls, formerly sales and general manager of the Gabriel Snubber Mfg. Company, has been elected president to succeed **Claude H. Foster,** founder of the company, who is now chairman of the board of directors. **R. J. Ketz** was elected treasurer and **David Benjamin** secretary.

J. H. Stickney has been appointed head of the experimental and production department of the Fageol Motors Company. His headquarters are in Detroit.

B. V. Unwin, sales and advertising manager of Hinkley Motors, Inc., resigned recently. He was formerly connected with the J. C. Wilson Co. and the Detroit Engine Works. His future plans have not been announced.

J. W. Weller has been appointed general manager of the Acme Motor Truck Company. He has filled various positions in the automotive industry, having been for a period of three years president and factory manager of Gray Motor Co. Prior to that he was manufacturing manager of Hirschell Spillman.

Edward G. Wilmer, former chairman of the board of Dodge Brothers, Inc., was elected president. **Ray, Robert** and **Joseph Graham** have resigned as vice-presidents. **A. T. Waterfall, H. H. Springford** and **A. Z. Mitchell** were re-elected vice-presidents. **Frederick J. Haynes** was made chairman of the board.

L. L. Woodward, H. Arthur Smith, Herbert Sinclair and **W. W. Battles** have been elected to the board of directors of the Autocar Company. The following directors were re-elected: **John S. Clarke, Walter W. Norton, E. A. Fitts, John C. Taney** and **A. T. Anthony.**

"Jay" Young, well known in the trade as eastern sales manager of the Axle Division of the Sheldon Spring & Axle Company of Wilkes-Barre, Pa., from 1907 to 1920, is now assistant sales manager. Since leaving Sheldon in 1920 Mr. Young has been sales manager of the Wills-Morrow Co. of Elmira, N. Y. Mr. Young will probably make his headquarters in Detroit.

THE May Commercial Car Specifications—Corrected Monthly

Commercial Car Specifications—Corrected Monthly

The Specifications, Chassis Prices, Etc., Are Corrected Each Month From Data Supplied Direct by the Makers. Gasoline Tractor-Trucks Will be Found at the End of Gasoline Commercial Cars

Those Chassis Which Are Sold and Recommended for Bus Use Are Designated in the Following Table by Reference Sign (§) in Front of the Name

For Motor Bus Chassis See Pages 44 and 45

(Where prices are not given it is because we have been unable to get them from authoritative sources)

Key of abbreviations, page 43

Trade Name and Model	General				Engine								Electrical System		Clutch	Gearset			Universals (Make)	Rear Axle			Gear Ratios		Brakes, Location	Front Axle Make and Model	Springs (Make)	Steering Gear (Make)	Wheels (Make)	Rims (Make)	Chassis Weight (lbs.) (stripped)
	Chassis Price	Standard Wheelbase (inches)	Tire Size: Front (inches)	Tire Size: Rear (inches)	Make and Model	Number of Cylinders Bore and Stroke	N.A.C.C. Rated H.P.	Valve Arrangement	Oiling System	Governor (Make)	Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Ignition System (Make)	Generator and Starter (Make)	Type and Make	Make and Model	Location	No. of Forward Speeds		Make and Model	Final Drive	Type	Total Reduction in High	Total Reduction in Low							
1000 Pounds																															
Chevrolet Sup. Com. Ch.	365	103	P 30x3½	P 30x3½	Own	4-3-11/16x4	21.7	H	PS	Non	Har	Car	V	Rem	Rem	P. Own	Own Sup	U	3	Own	Own Sup	S	½	3.82	12.7	A	Own Sup	S.S	Own	Hay	Jax	1490
Overland 91	395	100	P 30x3½	P 30x3½	Own 91	4-3½x4	19.6	L	SP	Non	Own	Til	G	A-L	A-L	P. Own	Own	A	3	Own	Own 91	B	½	4.50	17.6	A	Own 91	Own	Own	Hay	Hay	1472
Star Four	470	102	P 30x3½	P 30x3½	Con	4-3-3/16x4¼	18.2	L	PC	Non	Fed	Til	V	A-L	A-L	P. Own	Own	A	3	Spi	Own	S	½	4.87	16.16	A	Own	Own	Own	Hay	Hay	1475
1500 Pounds																															
Dodge Brothers	655	116	P 31x5.25	P 31x5.25	Own	4-37/16x4½	24.0	L	SP	Non	McC	Ste	V	N-E	N-E	D. Own	Own	U	3	Own	Own	S	½	4.16	18.9	A	Own	Own	Own	Kel	Kel	2202
Int. HarvesterSpec.Del	....	116	P 31x4	P 32x4½	Wau X	4-3½x4½	19.6	L	PC	Non	Lon	Zen	G	Rem	Rem	Roe	M-M	U	3	M-M	Eat	B	½	4.45	.....	B	Eat	.....	D-G	.....	Fir	2000
Larrabee A1	....	133	P 29x4½	P 29x4½	Con	6-31/8x4¼	23.4	L	PC	Non	Fed	Zen	G	Bos	Bos	P. B-L	B-L	U	3	Spi	Sal	B	½	5.10	17.1	....	Sal	She	Gem	Ind	Fir	2730
Rainier R-31	1970	125	P 35x5	P 35x5	Con N	4-3¾x5	22.5	L	PS	Non	Har	Zen	V	Eis	Non	D. B-L	B-L 30	U	3	Har	Tim 6258	W	½	6.75	22.5	A	Tim 1250	Per	Lav	Jon	Fir	2500
Stewart Buddy	895	118	P 30x5.25	P30x5.25	Con	6-2¾x4¾	18.2	L	PC	Non	Own	Zen	G	Rem	Rem	D. Own	Own	U	3	Own	Own	B	½	4.8	30.0	A	Own	Own	Gem	Own	Fir	2250
White. 15	2150	133½	P 34x5	P 34x5	Own GK	4-3¾5½	22.5	L	SP	Non	Own	Zen	G	.....	.....	P. Own	Own	U	4	Spi	Own 15	S	½	4.67	20.2	A	Own 15	.....	Own	Hoo	Fir	3225
White 15-45	2950	143½	P 34x5	P 34x5	Own GR	4-4¼x5¾	28.9	L	PC	Non	Own	Zen	V	.....	.....	P. Own	Own	U	4	Spi	Own	S	½	5.36	26.7	A	Own	.....	Own	Hoo	Fir	3575
Yellow Cab Mod T3	1295	109	P 29x4½	P 29x4½	Con V7	4-3¾x5	22.5	L	PS	Non	Lon	Zen	G	Bos	N-E	D. B-L	B-L 30Y	U	3	Spi	Tim 5331	B	½	4.90	16.3	B	Tin 1341 Dey	Mar	Gem	Mot	Fir	2500
1 Ton																															
Acme Flyer	....	130	P 30x5	P 30x5	Con S4	4-4¼x4½	28.9	L	FP	Non	Per	Zen	V	Bos	Bos	D. B-L	B-L31	U	3	Blo	Col 53006	S	F	5.10	24.4	A	Col 5303	Det	Ros	Smi	Fir	3125
Acorn	2050	144	P 34x5	P 34x5	Con S4	4-4¼x4½	28.9	L	FP	Non	Chi	Zen	G	RBo	A-L	D. Ful	Ful SU12	U	3	Spi	Cla 366	S	½	5.66	22.6	A	Shu 310	Tut	Ros	.....	.....	3600
Atterbury 26B	....	132	P 30x5	P 30x5	Lyc S	6-3⅛x4½	23.4	L	PC	Non	Fed	Zen	G	A-L	A-L	D. B-L	B-L	U	3	Blo	Cla	B	...	5.10	17 03	A	Shu	She	Gem	Bim	Fir	3200
Autocar F	....	97	S 34x4‡	S 34x6‡	Own	2-4⅜x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.30	33.2	A	Own F	Del	Ros	Hoo	.....	3800
Autocar G	....	120	S 34x4‡	S 34x6‡	Own	2-4⅜x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.30	33.2	A	Own F	Del	Ros	Hoo	.....	3900
Available L-1	....	133	P 33x5	P 33x5	Her O	4-4x5	25.6	L	PC	Non	Chi	Zen	G	Bos	Bos	D. B-L	B-L 30	U	3	Spi	Cla B307	B	½	5.6	23.4	A	Shu 5504	Tut	Ros	Bim	Fir	3100
§Bethlehem KN	1595	125	P 33x5	P 33x5	Own KN	4-3½x5	19.6	L	FP	Non	Bus	Zen	V	Bos	G&D	P. B&B	Ful SU	U	3	Spi	Eat 1000	B	½	6.86	27.4	..	Eat 750	Mat	Ros	Van	Fir	2880
Betz J-3	1850	140	P 34x5	P 34x5	Own J3	4-3⅜x5⅛	22.5	L	....	Non	Chi	Zen	G	Bos	Bos	D. B-L	B-L 30	U	3	Pet	Tim 6352	W	½	.....	.....	A	Tim 1250	Mar	Ros	.....	Fir	3150
Biederman	....	138	P 30x5	P 30x5	Con 8R	6-3⅜x4½	27.3	L	PC	Non	Own	Zen	G	Del	A-L	D. B-L	B-L 31	U	3	Spi	Cla	B	½	5.5	27.	A	Shu	Mat	Ros	Cla	Fir	3200
Casco A	1700	130	P 34x5	P 34x5	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	G&O	Zen	V	Bos	Bos	D. Ful	Ful SUI	U	3	Spi	Col 5200	S	¾	5.85	23.4	A	Col 5000	Per	Woh	Arc	Fir	3200
§Chevrolet Sup	550	124	P 30x3½	P 30x5	Own Sup	4-3-11/16x4	21.7	H	PS	Non	Har	Car	V	Rem	Rem	P. Own	Own Sup	U	3	Own	Own Sup	S	½	5.43	18 0	A	Own Sup	S.S	Own	Hay	Jax	1985
Chicago 10	....	132	P 30x5	P 30x5	Her OX	4-4x5	25 6	L	PC	Non	Chi	Zen	G	Apo	A-L	D. B-L	B-L 31	U	3	Pic	Cla B365	B	½	5.66	27.16	A	Tim 1250	Mat	Ros	StM	Fir	3240
Commerce Distributor	....	130	P 30x5	P 30x5	Con 7U	6-3½x4¼	23.4	L	PC	Non	Rac	Zen	V	Bos	Bos	P. Hoo	Cov JUH	U	3	Blo	Cla B365	B	½	5.66	20.5	A	Fli	Bea	Ros	Smi	Fir	2900
Corbitt 20	....	130	S 30x5	S 30x5	Con 20L	6-2¾x4¾	18.1	L	FP	Non	McC	Zen	V	Rem	Rem	D. B-L	B-L	U	3	Spi	Cla B365	B	½	5.66	.....	A	Eat 750	She	Ros	Smi	Fir	3025
Denby 41	....	128	P 34x5	P 34x5	Her O	4-4x5	25.6	L	PC	.....	Lon	Zen	G	A-L	A-L	D. Ful	Ful	U	3	U-P	Col	S	¾	5.8	23.2	....	Con	Det	Ros	StM	Fir	3315
§Diamond T76	....	130	P 30x5	P 30x5	Her OX	4-4x5	25.6	L	PC	Non	G&O	Zen	G	Apo	A-L†	D. Cov	Cov JUC	A	3	Spi	Col 53008	B	¾	5.12	18.6	A	Col 5306	Mat	Gem	StM	Fir	2825
Dorris K-2	2490	Opt	P 33x5	P 33x5	Own	4-4x5	25.6	H	PS	Non	Mod	Str	V	Bos	Wes	D. Own	W-G	U	3	Spi	Tim 5512	B	½	4 23	15 6	A	Tim 1250	Row	Ros	Mun	.....	2000
Duplex G	....	132	P 33x5	P 33x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Mod	Zen	V	Bos	Bos	D. B-L	B-L	U	3	Pet	Tim	B	½	5.50	22.0	A	Tim 1250	Pen	Ros	Mot	Fir	3300
Federal Knight	1055	124	P 32x4½	P 32x4½	Kni	4-3⅝x4½	21.0	S	I-C	Non	Own	Zen	G	Eis	A-L	P. B&B	Own	U	3	U-M	Tim 5310	B	½	6.11	22.3	A	Own	Mat	Gem	Mot	Fir	2400
§Ford T	365	123	P 30x3½	P 30x5	Own T. T.	4-3¾x4	22.5	L	SP	Non	Own	Own	G	Own	Own	D. Own	Own TT	U	2	Own	Own TT	W	½	Opt	19.9	B	Own TT	Own	Own	.....	.....	1577
§Garford 15	1790	132	P 34x5	P 34x5	Bud MU	4-3⅝x5⅛	21.0	L	PC	Non	Lon	Str	G	A-L	A-L	P. B&B	Own 15	U	3	Spi	Tim 6258	W	½	6.50	20.55	A	Own 15	Per	Ros	StM	Fir	3500
§Garford 15	1790	132	P 34x5	P 34x5	Bud MU	4-3⅝x5⅛	21.0	L	PC	Non	Lon	Str	V	Eis	Rem	D. Ful	Ful TU¾	U	3	Blo	Tim 5511	B	½	5.50	24.7	A	Tim 1250	Det	Ros	Pru	Gdy	3200
§Gary Express	1590	132	S 35x5	S 35x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	.....	Chi	Str	V	Eis	Rem	D. Own	Own K-17	U	3	U-M	Own K-17	B	¾	6.1	23.67	E	Own K-17	Own	Own	Kel	.....	3433
§GMC K-17	....	136	P 34x5	P 34x5	Own K17	4-3-1/16x6	20.3	L	FP	Own	McC	Mar	G	Eis	Rem	P. B&B	B-L 20	U	3	Spi	Cla B307	B	½	5.66	15.0	B	Sal 1546-E	Det	Gem	Van	Cle	3000
Gotfredson 20 B	....	131°	P 30x5	P 30x5	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	McC	Zen	V	Rem	Rem	D. Dod	Dod	U	3	U-P	Own	S	½	5.10	21.3	A	Dod	Det	Dod	StM	Fir	2630
§Graham Bros. BB	975	130	P 33x5	P 33x5	Dodge	4-37/16x4½	24.1	L	PS	Non	McC	Dod	V	N-E	N-E	D. Dod	Dod	U	3	U-P	Own	S	½	5.10	21.3	A	Dod	Det	Dod	StM	Fir	2870
Graham Bros. IB	1045	140	P 33x5	P 33x5	Dodge	4-37/16x4½	24.1	L	PS	Non	McC	Dod	V	N-E	N-E	D. Dod	Dod	U	3	Pic	Sal A	B	¾	6.14	24.56	B	Sal D	Per	Ros	Ind	Fir	2900
Gramm-Bernstein 10	....	129	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1002	B	½	5.33	21.3	B	Col 5300	Mat	Ros	.....	Fir	3485
Gramm-Kincaid 233N	....	133°	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1002	B	½	5.33	21.3	B	Col 5300	Mat	Ros	.....	Fir	3585
Gramm-Kincaid 263N	....	133°	P 30x5	P 30x5	Con 8R	6-3⅜x4½	27.3	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Spi	Cla B366	S	½	5.1	21.2	B	Con	Det	Ros	Van	Fir	2370
Grass Premier 40	1650	130	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Chi	Str	V	Bos	Bos	D. B-L	B-L 31	U	3	Blo	Cla B365	S	½	5.66	22.6	A	Sal D	She	Ros	Bim	Fir	3300
Indiana 11	....	129°	P 30x5	P 30x5	Her OX	4-4x5	25.6	L	PC	Non	McC	Str	G	A-L	A-L	P. B&B	B-L 31	U	3	Spi	Tim 5331	B	½	4.90	16.3	B	Tin 1341 Dey	Mar	Gem	Mot	Fir	2500
Intert'l Harvester S	....	124	P 32x4½	P 32x4½	Lyc KB	4-3½x5	19.6	L	PC	Non	Lon	Zen	G	Rem	Rem	P. Lon	Own	U	3	M-M	Eat	B	½	5.66	22 6	A	Eat	....	CAS	.....	.....	2800
Kenworth OS	2150	131	S 30x5	S 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Zen	V	Rem	Rem	D. B-L	B-L 31	U	3	Spi	She W 1002	W	½	6.00	28.8	A	She 33FA500	Lah	Ros	Smi	Fir	4100
King-Zeitler 25	....	134°	P 30x5	P 30x5	Con S4	4-4¼x4½	28.9	L	FP	Mon	Chi	Str	G	Eis	Bos‡	D. B-L	B-L 31	U	3	Pic	Tim 5620	B	F	5.1	24.5	A	Tim 1250	Mar	Ros	StM	Fir	3500
Kissel	....	140	P 34x5	P 34x5	Own	4-37/16x5½	24.1	L	SP	Non	McC	Str	V	Rem	Rem	D. W-G	W-G T38L	U	3	Spi	Tim 6258	W	F	5.16	18.88	A	Tim 1452	Mat	Ros	Bim	Fir	3780
Kleiber	2600	130	S 34x4	S 34x7	Con J4	4-3¾x5	22.5	L	FP	Non	R-T	Str	V	Bos	Non	D. B-L	B-L 35	U	4	Spi	Tim 6462	W	½	6.75	.....	A	Tim	Bet	Ros	Smi	Fir	.....
Kleiber	1800	140	S 32x6	S 32x6	Con 8R	6-3⅜x4½	27.3	L	FP	Non	Own	Str	V	Del	.....	D. B-L	B-L 31	U	3	Spi	Tim 5620	B	F	6.42	.....	A	Tim 1250	Bet	Ros	Smi	Fir	3500

Key of abbreviations, page 43

Trade Name and Model	General: Chassis Price	General: Standard Wheelbase (inches)	General: Tire Size: Front (inches)	General: Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Engine: Fuel System: Carburetor (Make)	Engine: Fuel System: Fue Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Springs (Make)	Steering Gear (Make)	Wheels (Make)	Rims (Make)	Chassis Weight (lbs.) (stripped)
1 Ton—Cont'd																																
LeMoon GP-1	....	151	P 34x5	P 34x5	Con S4	4-4¼x4½	28.9	L	FP	Non	Chi	Str	G	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Cla B365	B	½	5.6	.....	A	Tim 1250	Tut	Ros	StM	.....	2700
Master 11B	....	132	P 33x5	P 33x5	Bud WTU	4-3¾x5⅛	22.5	L	....	.....	.....	Zen	..	Bos	Bos	D. Ful	Ful SU	.....	3	Spi	Cla	S	.....	5.0	.....	...	Tim	Ros	.....	.....	.....	.....
§Menominee	....	132	P 35x5	P 35x5	Wis SU	4-4x5	25.6	H	PC	Non	Per	Zen	G	Eis	Bos	P. B&B	Det KY400	U	3	Blo	Col	S	½	4.58	18.3	A	Col	Per	Lav	Std	Fir	2625
§Nash 2018	1595	130	S 34x4‡	S 34x5‡	Own 4	4-3¾x5¼	22.5	L	....	Sim	Lon	Str	G	Eis	A-L	P. B&B	D-G C	U	3	Own	Cla 1-D	I	D	6.80	21.8	D	Own 2018	Har	Lav	A-W	.....	3400
Noble A-76	1775	143	S 30x5	S 32x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Chi	Str	V	Spl	Bos	D. Ful	Ful SU12	U	3	Blo	Cla B-360	B	½	6.28	25.1	B	Shu 310	Tut	Ros	Bim	Fir	3400
Ogden A2	....	125	P 34x5	P 34x5	Con N	4-3¾x5	22.5	L	PS	Non	Chi	Zen	V	Eis	Rem	D. B-L	B-L 30	U	3	Pic	Tim 6258	W	½	5.10	18.6	A	Tim 1250	Tut	Ros	Bim	Gdy	3100
O. K.	1795	131	P 34x5	P 34x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Zen	V	Eis	Dyn	D. Ful	Ful TW3	U	3	Har	Tim 6258	W	½	6.75	.....	A	Tim 1250	Tut	Ros	Mot	Fir	3250
Penn	780	122	P 30x3½	P 32x4½	Overland	4-3½x4	19.6	L	....	Non	Own	Til	G	A-L	A-L	P. B&B	Own	U	3	Own	She	W	½	5.50	20.0	A	Own	Own	Own	Sch	Fir	2175
Rainier R-29	....	133	P 35x5	P 35x5	Con N	4-3¾x5	22.5	L	PS	Mon	Har	Zen	V	RBo	Bos‡	D. B-L	B-L 30	U	3	Spi	Tim 6258	W	½	6.75	22.5	A	Tim 1250	Per	Lav	Jon	.....	2700
Ruggles 16	....	122	S 30x5	S 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Per	Zen	G	Rem	Rem	D. B-L	B-L	U	3	Spi	Col 30000	B	¾	4.7	15.7	A	Col 3000	Det	Lav	Nor	Fir	2600
Sandow G	....	120	S 33x5	S 33x5	Bud WTU	4-3¾x5⅛	22.5	L	PS	Non	Chi	Str	G	Eis	Non	D. Ful	Ful TU¾	U	3	Spi	She	W	.....	5.5	23.4	A	Shu 310	.....	Ros	Opt	Fir	3000
Sandow GA	....	130	S 32x6	S 32x6	Her OX	4-4x5	25.6	L	PC	Non	Own	Str	G	Bos	A-L	D. Ful	Ful TU¾	U	3	Spi	She	S	½	5.5	15.6	A	Shu 310	Mar	Lav	Dis	Fir	3000
Schacht	....	132	P 30x5	P 30x5	Wis SU	4-4x5	25.6	H	PC	Non	Own	Zen	V	Bos	Non	D. Ful	Ful GU-7	U	4	Blo	Wis	.....	.....	6.00	28.8	A	Shu 510	She	Ros	.....	.....	3755
Service 25H	....	146	P 32x6	P 32x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Zen	V	Rem	Rem	P. B&B	B-L 31	U	3	M-E	Tim 5620	B	F	6.42	30.8	A	Shu 310-20	She	Ros	Smi	Fir	3900
Stewart 16	1245	130	P 32x4½	P 32x4½	Lyc CT	4-3¾x5	22.5	L	FP	Non	Own	Zen	G	Rem	Rem‡	D. Ful	Ful SU-1	U	3	Spi	Cla B-365	B	¾	5.10	24.0	A	Col 3008	Det	Gem	Ind	Fir	2700
United 15	....	125	S 32x4½	S 32x4½	Own	4-3½x5	19.6	L	PC	Non	Per	Zen	G	A-L	A-L	D. B-L	B-L	U	3	Blo	Cla B-365	...	½	5.1	.....	A	Shu 5400	Det	Lav	.....	Fir	.....
§U. S. U.	1850	138	P 34x5	S 34x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Str	V	Bos	Bos	D. Ful	Ful LTU5	U	3	Blo	Cla B-501	B	½	6.25	25.0	A	Shu 350	She	Lav	Sch	Fir	3400
Wachusett S	....	152	S 34x5	S 34x5	Con 8R	6-3⅜x4½	27.3	L	PC	Non	G&O	Zen	V	Bos	Bos	D. B-L	B-L 30	U	3	Har	Tim 5511	W	¾	5.5	22.5	...	Tim 1250	Sav	Ros	Smi	Fir	3300
Wilcox AA	1900	130	S 35x5‡	S 35x5‡	Bud WTU	4-3¾x5⅛	22.5	L	PC	Dup	.....	Str	V	Bos	Wes‡	D. B-L	B-L 30	U	3	Spi	Rus 3600-B	W	½	7.7	25.8	A	Shu 350	She	Gem	.....	.....	3600
Yellow Cab T1	1450	130	P 33x5	P 33x5	Con V4	4-3¾x5	22.5	L	PS	Non	Lon	Zen	V	Bos	N-E	D. B-L	B-L 35	U	4	Spi	Tim 5516	B	½	5.37	17.3	B	Tim3341EGO	Mar	Gem	Mot	Fir	3130
Yellow Cab T-1	1550	150	S 33x5	S 33x5	Con V4	4-3¾x5	22.5	L	PS	Non	Lon	Zen	V	Bos	N-E	D. B-L	B-L 35	U	4	Spi	Tim 5516	B	½	5.37	17.3	B	Tim3341EGO	Mar	Gem	Mot	Fir	3210
Yellow Knight T2	1095	124	P 32x4½	P 32x4½	Kni S	4-3⅛x5	18.9	X	PS	Non	McC	Zen	G	Rem	Rem	P. B&B	Mun T23	U	3	Thei	Tin 5310-21	S	½	6.14	24.5	A	Tor 750F	Mar	Gem	Bud	Fir	2740
1¼ Ton																																
Autocar F	....	97	S 34x4‡	S 34x6‡	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.3	33.2	A	Own F	Del	Ros	Hoo	.....	3800
Autocar G	....	120	S 34x4‡	S 34x6‡	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.3	33.2	A	Own F	Del	Ros	Hoo	.....	3900
Biederman	....	154	S 34x5	S 34x6	Con 6M	6-3⅜x4½	27.3	L	PC	Han	Own	Zen	G	Del	A-L	D. B-L	B-L 31	U	3	Spi	Tim	W	½	7.2	35.0	A	Shu	Mat	Ros	StM	Non	3600
Brockway E	....	135	P 33x5	P 33x5	Wis SU	4-4x5	25.6	H	FP	Non	G&O	Zen	V	Eis	L-N	D. B-L	B-L 30	U	3	Spi	Col 52024	B	¾	5.12	.....	A	Col	She	Gem	Van	Fir	3125
Brockway E8	....	153	P 32x6	P 32x6	Wis SU	4-4x5	25.6	H	FP	Non	G&O	Zen	V	Eis	L-N	D. B-L	B-L 30	U	3	Spi	Col 53003	B	¾	5.12	.....	A	Col	She	Gem	Van	Fir	4000
Brockway EY	....	150	P 33x5	P 33x5	Wis 6Y	6-3⅜x5	27.3	H	FP	Non	G&O	Zen	V	Eis	L-N	D. B-L	B-L 30	U	3	Spi	Col 53000	B	¾	5.85	.....	A	Col	She	Gem	Van	Fir	3500
Clinton 20B	....	153	P 30x5	P 30x5	Wau V	4-4x5	25.6	L	PC	Non	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Blo	Cla B501	B	½	6.28	29.5	A	Shu 5405	Per	Ros	StM	Fir	3750
Clinton 20	....	153	P 30x5	P 30x5	Wau V	4-4x5	25 6	L	PC	Non	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Blo	Tim 6258	W	½	6.25	30.0	A	Tim 1250	Per	Ros	StM	Fir	3750
Defiance G2	....	128	S 35x5	S 35x5	Con J4	4-3¾x5	22.5	L	PC	Non	Chi	Zen	V	Bos	Bos	D. Ful	Ful SU2	U	3	Har	Eat 1000	B	½	6.14	24.5	A	Col 7000	Det	Lav	StM	Fir	2900
Defiance GL2	....	140	S 35x5	S 35x5	Con J4	4-3¾x5	22.5	L	PC	Non	Chi	Zen	V	Bos	Bos	D. Ful	Ful SU2	U	3	Har	Eat 1000	B	½	6.14	24.5	A	Col 7000	Det	Lav	StM	Fir	3050
Eagle 101	....	134°	P 34x5	P 34x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Opt	Own	Zen	G	Eis	Bos‡	D. Cov	Cov C	U	3	M-E	Tor 1000	I	D	6.60	24.0	A	Col 5000	Cha	Ros	Std	Fir	3800
Federal R-3	1675	132	P 33x5	P 33x5	Con J4	4-3¾x5	22.5	L	FP	Non	Own	Zen	V	Eis	Rem	P. B&B	Det	U	3	Pet	Tim 6250	W	½	5.60	18.7	A	Tim 1250	....	Gem	Dis	.....	2950
Gramm-Bernstein 10	....	129	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun AS11T23N	U	3	Pic	Sal A	B	¾	6.14	24.56	B	Sal D	Per	Ros	Ind	Fir	2900
Gramm-Kincaid 233N	....	133°	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1002	B	½	5.33	21.3	B	Col 5300	Mat	Ros	.....	Fir	3485
Gramm-Kincaid 263 N	....	133°	P 30x5	P 30x5	Con 8R	6-3⅜x4½	27.3	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1002	B	½	5.33	21.3	B	Col 5300	Mat	Ros	.....	Fir	3585
Guilder B	....	132	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	.....	.....	G&O	Zen	G	Eis	Bos	. B-L	B-L 31	.....	.....	.....	Cla 366	.....	.....	5.5	.....	...	Shu 5405	Mer	Ros	Ind	Fir	3250
Guilder B-6	....	132	P 30x5	P 30x5	Con 8R	6-3⅜x4½	27.3	.....	.....	.....	G&O	Zen	G	Eis	Bos	. B-L	B-L 31	.....	.....	.....	Cla 366	.....	.....	5.5	.....	...	Shu 5405	Mer	Ros	Ind	Fir	3000
Hahn B2	1650	132°	P 30x5	P 30x5	Her OX	4-4x5	25.6	L	FP	Non	Chi	Str	G	Bos	Bos	D. B-L	B-L	U	3	Spi	Cla 365	B	½	5.0	.....	A	Tim 1250	She	Ros	Opt	Opt	2900
Maccar 36	....	140	S 30x5	S 30x5	Bud HS	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	Rem	Rem	D. Ful	Ful SU10	U	3	Pic	Eat 1002	B	½	5.66	22.6	A	Shu 5405	Row	Ros	Van	Fir	3535
Master 11	....	132	P 33x5	P 33x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Chi	Zen	G	Bos	Bos	D. Ful	Ful SU	U	3	Spi	Tim 5620	B	½	5.5	22.0	A	Tim	Det	Ros	StM	Fir	3200
Menominee HT	....	130	S 34x3½‡	S 36x5‡	Wis SU	4-4x5	25.6	H	PC	Mon	Own	Zen	V	Eis	Bos	D. Det	Cot AAU	U	3	Spi	Wis	W	½	7.75	28.5	A	Shu	Tut	Ros	Std	Fir	3525
Patriot 17R	....	129	P 30x5	P 32x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Mod	Zen	V	Bos	Bos	P. B&B	.....	A	3	The	Tim 6258	W	½	5.6	22.8	A	Shu	Mar	CAS	Bim	Fir	3200
§Reo F	1090	130	P 33x5	P 33x5	Own F	4-4⅛x4½	27.2	D	PS	Non	Own	Joh	V	N-E	N-E	D. Own	Own	A	3	Own	Own	S	½	4.7	17.3	A	Own	Pen	Own	Mot	Fir	2890
Reo F	1240	130	P 33x5	P 33x5	Own T	6-3⅛x5	24.3	D	PS	Non	Own	Sch	V	N-E	N-E	D. Own	Own	A	3	Own	Own	S	½	4.7	17.3	A	Own	Pen	Own	Mot	Fir	2980
Republic 75	....	124°	P 33x5	P 33x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Per	Str	V	Bos	Bos	D. Ful	Ful	U	3	U-M	Eat	I	D	5.65	22.6	A	Eat	Mat	Lav	Bim	Fir	2700
§Ruggles 20R	....	128	P 34x5	P 34x5	Her O	4-4x5	25.6	L	PC	Non	Per	Zen	G	Rem	Rem	D. B-L	B-L 31	U	3	Blo	Col 53000	S	¾	5.12	20.4	A	Col 5300	Det	Jac	Nor	Fir	2950
Sanford W6-12	....	151	S 30x5	S 30x5	Con 8R	6-3⅜x4½	27.3	L	PC	Non	R-T	Str	G	Con	Dyn	D. Ful	Ful	U	3	Spi	Eat	B	½	5.3	21.2	A	Eat	She	Ros	Van	Gdy	2960
Selden Pacemaker 24	....	144°	S 30x5	S 30x5	Her O	4-4x5	25.6	L	PC	Non	Own	Str	G	Bos	Bos	D. B-L	B-L 31	U	3	.....	Cla	B	F	.....	.....	A	Cla	.....	Ros	Van	.....	3580
Selden Pacemaker 26	....	144°	S 30x5	S 30x5	Con 8R	6-3⅜x4½	27.3	L	PC	Non	Own	Str	G	Bos	Bos	D. B-L	B-L 31	U	3	.....	Cla	B	F	.....	.....	A	Cla	.....	Ros	Van	.....	3580
§Standard 75	....	134°	S 34x5	S 34x5	Con J4	4-3¾x5	22.5	L	PS	Sim	Lon	Str	V	Eis	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.75	32.4	A	Tim 1250	Per	Gem	StM	Fir	3000
Stewart 16X	1370	130	P 33x5	P 33x5	Lyc	6-3¼x4½	25.3	L	FP	Non	Own	Zen	G	Rem	Rem	D. Ful	Ful	U	3	.....	Cla	B	½	5.1	24.0	A	.....	.....	Gem	.....	Fir	2750
Stoughton C	....	131	P 34x4½	P 34x4½	Own	6-3⅜x4½	27.3	L	FP	Non	Chi	Zen	V	Bos	Bos	D. Det	Own	U	3	The	Col 53000	S	¾	5.87	20.0	A	Col 5300	Own	Ros	Bim	Gdy	2650
United 20	....	130	P 30x5	P 30x5	Own	4-4x5	25.6	L	PC	.....	Own	Zen	..	Bos	.....	D. B-L	B-L	U	3	.....	Cla	B	½	5.1	.....	A	.....	.....	Lav	.....	.....	.....
United 25	....	131	S 30x5	S 30x5	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Bos	Bos	D. B-L	B-L 31	U	3	Blo	Col 53000	B	¾	5.1	23.7	A	Shu 310	Det	Lav	Van	Fir	2910
Victor 25	1635	131	P 33x5	P 33x5	Her O	4-4x5	25.6	L	PC	Non	Per	Zen	V	A-L	A-L	D. Ful	Ful SU12	U	3	Pic	Col 53000	S	¾	5.1	20.4	B	Col 53000	Det	Lav	Van	Fir	3000
1½ Ton																																
§Acme 20L	....	136	P 34x5	P 34x5	Con 8R	6-3⅜x4½	27.3	L	PC	Non	G&O	Zen	V	Bos	Bos‡	P. B-L	B-L	U	3	Blo	Tim 6258	W	½	6 25	30.0	A	Tim 1460	Det	Ros	Bim	Fir	3565
Acorn	2300	144	S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	PC	Non	Chi	Zen	G	RBo	.....	D. Ful	Ful SU12	U	3	Spi	Cla B750	S	½	7.00	38.0	A	Shu 350	Tut	Ros	.....	.....	4400
§Armleder 30	....	148°	S 34x4	S 34x6	Her OX	4-4x5	25.6	L	PC	Non	Own	Zen	V	Bos	Bos‡	D. B-L	B-L	U	4	Spi	Tim	W	½	7.25	39.0	A	Tim	She	Ros	Smi	Fir	4400
Armleder 30B	....	148	S 34x4	S 34x6	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	Bos	Bos‡	D. B-L	B-L	U	4	Spi	Tim	W	½	7.25	39.0	A	Tim	She	Ros	Smi	Fir	4400
Atterbury 24R	....	150°	S 34x4‡	S 34x6‡	Bud KTU	4-4x5¼	25.6	L	PC	Non	Own	Zen	G	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	¾	6.5	31.1	A	Tim 1460	S.P	Gem	Arc	Fir	4750
§Autocar F	....	97	S 34x4	S 34x6	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.3	33.2	A	Own F	Del	Ros	Hoo	.....	3800
Autocar G	....	120	S 34x4	S 34x6	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.3	33.2	A	Own F	Del	Ros	Hoo	.....	3900
§Available L-1½	....	154	S 34x4	S 34x5	Her O	4-4x5	25.6	L	PC	Non	Chi	Zen	G	Bos	Bos	D. B-L	B-L 31	A	3	Spi	Cla B501	½	B	6.25	31.2	A	Shu 5504	Tut	Ros	Bim	Fir	3600
Biederman	....	166°	S 34x5	S 34x8	Con 6M	6-3⅜x4½	27.3	L	PC	Non	Own	Zen	G	Del	Del	D. B-L	B-L 31	U	3	Spi	Tim	W	½	7.75	38.0	A	Shu	Mat	Ros	StM	Non	4600
Buck 34	....	160°	P 32x6	P 32x6	Con S4	4-4¼x4½	28.9	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.25	30.0	A	Tim 1460	Mat	Ros	Smi	Fir	3600
Buck 36	....	160°	P 32x6	P 32x6	Con 8R	6-3⅜x4½	27.3	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.25	30.0	A	Tim 1460	Mat	Ros	Smi	Fir	3500
Chicago 15	145	132	P 32x6	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 31	U	3	Pet	Tim 6462	W	½	7.75	37.2	A	Tim 1460	Mat	Ros	StM	Fir	4000
Clinton 32	153	....	P 32x6	P 32x6	Wau V	4-4x5	25.6	L	PC	Non	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Blo	Cla 501	B	½	6.28	29.5	A	Shu 5405	Per	Ros	St M	Fir	3950

§Autocar F		97	S 34x4	S 34x6	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos		P. Own	Own F	A	3	Spi	Own F	R	F	8.3	33.2	A	Own F	Del	Ros	Hoo	....	3800						
Autocar G		120	S 34x4	S 34x6	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos		P. Own	Own F	A	3	Spi	Own F	R	F	8.3	33.2	A	Own F	Del	Ros	Hoo	....	3900						
§Available L-1½		154	S 34x4	S 34x6	Her G	4-4x5	25.6	L	PC	Non	Chi	Zen	G	Bos	Bos	D. B-L	B-L 31	A	3	Spi	Cla B501	R	F	6.25	31.2	A	Shu 5504	Tut	Ros	Bim	Fir	3600						
Biederman		166°	S 34x5	S 34x8	Con 6M	6-3⅝x4½	27.3	L	PC	Non	Own	Zen	G	Del	Del	D. B-L	B-L 31	U	3	Spi	Tim	W	F	7.75	38.6	A	Shu	Mat	Ros	StM	Non	4600						
Buck 34		160°	P 32x6	P 32x6	Con S4	4-4¼x4½	28.9	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.25	30.0	A	Tim 1460	Mat	Ros	Smi	Fir	3600						
Buck 36		160°	P 32x6	P 32x6	Con 8R	6-3⅝x4½	27.3	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.25	30.0	A	Tim 1460	Mat	Ros	Smi	Fir	3500						
Chicago 15		145	P 32x6	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 31	U	3	Pet	Tim 6462	W	½	7.75	37.2	A	Tim 1460	Mat	Ros	StM	Fir	4000						
Clinton 32		153	P 32x6	P 32x6	Wau V	4-4x5	25.6	L	PC	Non	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Blo	Cla 501	B	½	6.28	29.5	A	Shu 5405	Per	Ros	St M	Fir	3950						
§Commerce Super 11		142	P 34x5	P 36x6	Con S4	4-4¼x4½	28.9	L	FP	Non	Lon	Zen	V	Bos	Bos	D. Ful	Ful SU12	U	3	Blo	Cla B-501	S	½	6.28	22.0	A	Fli	Bea	Ros	Smi	Fir	3575						
Concord EO	2500	135	S 32x6	S 32x6	Bud KBU	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	Eis	Bos	D. B-L	B-L	U	3	Spi	Tim 6352	W	½	6.2	24.8	A	Tim 1452	.....	Ros	Arc	Fir	3500						
Corbitt 25		140	S 30x5	S 32x6	Con S4	4-4¼x4½	28.9	L	FP	Non	McC	Str	V	Bos	Bos	D. B-L	B-L 31	U	3	Spi	She W-1501	W	½	6.5	25.9	A	She FA500	She	Ros	Smi	Fir	4100						
Day-Elder G		128°	S 34x4‡	S 34x5‡	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Bus	Zen	V	Eis	Bos‡	D. B-L	B-L 20B	U	3	Spi	Tim 6258	W	½	6.25	20.7	A	Tim 1250	I.C.	Gem	Van	Fir	3700						
Defiance A		140	S 34x4	S 34x6	Wis CAU	4-3¾x5	22.5	L	PC	Non	Chi	Zen	V	A-L	A-L	D. Ful	Ful	U	3	Spi	Own	W	½	7.75	.....	A	Tim 1520	Det	Lav	StM	....	3315						
Defiance D2		140	S 35x5	S 36x6	Con J4	4-3¾x5	22.5	L	PC	Non	Chi	Zen	V	Bos	Bos	D. Ful	Ful SU 2	U	3	Har	Wis 66	R	½	7.10	36.6	A	Col 7000	Det	Lav	StM	Fir	3200						
Defiance F		128	S 35x5	S 35x5	Con S4	4-4¼x4½	28.9	L	FP	Non	Stn	Zen	V	A-L	A-L	P. B&B	Det	U	3	Spi	Own	B	½	4.46	.....	A	Own	Det	Lav	....	....	3210						
Denby 41A		128	P 34x5	P 36x6	Her O	4-4x5	25.6	L	PC	.....	Lon	Zen	G	A-L	A-L	D. Ful	Ful	U	3	U-P	Col	S	¾	5.8	23.2	..	Con	Det	Ros	StM	Fir	3365						
Diamond T3		144	S 36x4	S 36x7	Her OX	4-4x5	25.6	L	PC	Non	G&O	Str	...	Bos	A-L‡	D. Cov	Cov JUC	U	3	Spi	Tim 6462	W	½	7.25	28.09	A	Shu 510	Mat	Ros	StM	....	5250						
Diamond T4		144½	P 30x5	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	G&O	Str	...	Bos	A-L‡	D. Cov	Cov JUC	U	3	Spi	Tim 6462	S	F	7.25	28.09	A	Shu 510	Mat	.....	StM	Fir	4500						
Dixon D	2395	146	S 34x5	S 34x5	Con S4	4-4¼x4	28.9	L	FP	.....	G&O	Zen	G	Bos	Bos	D. Ful	Ful GU-8	U	4	Spi	Col	S	F	Opt	Opt	A	Tim 1520	S.P	Ros	StM	....	3700						
Duplex GH		138	P 35x5	P 36x6	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	Mod	Zen	V	Bos	Bos	D. Cov	Cov	U	3	Pet	She	W	½	6.50	26.0	A	She	Pen	Ros	Mot	Fir	3900						
Fageol 230	3150	150	S 36x4	S 36x7	Wau V	4-4x5	25.6	L	PC	Wau	Own	Zen	V	Bos	Bos	D. B-L	B-L 35	U	4	Spi	Tim 6462	W	¾	9.75	52.22	A	Tim1460DXZ	Mat	Ros	Van	....	5200						
Federal S25		144	P 30x5	P 32x6	Kni	4-3⅝x4½	21 0	..	PC	Mon	Own	Zen	V	A-L	A-L	P. B&B	Own	U	3	U-M	Tim 5620	B	½	6.43	.....	A	Own	Mat	Gem	Mot	Fir	3000						
Federal S25		156	P 30x5	P 32x6	Kni	4-3⅝x4½	21 0	..	PC	Mon	Own	Zen	V	A-L	A-L	P. B&B	Own	U	3	U-M	Tim 5620	B	½	6.43	.....	A	Own	Mat	Gem	Mot	Fir	3200						
Fisher Fast Freight		146	S 30x5	S 32x6	Con S4	4-4¼x4½	28.9	L	FP	Non	Lon	Str	V	Bos	Bos	D. Lon	M.M.	U	3	Blo	Col Spec R	B	F	5.8	19.8	A	Col Spec R	Amc	Gem	Own	Fir	3500						
Flint Road King		130°	P 34x5	P 34x5	Her O	4-4x5	25.6	L	PC	Non	Fed	Zen	G	A-L	A-L	P. B&B	W-G Spec	A	3	Spi	Fli Spec	B	F	4.9	17.3	...	Fli Spec	Arm	Lav	Hay	Hay	3320						
Front Drive FT	2800	120	S 36x6‡	S 36x6‡	Bud CTU	4-3¾x5¼	22.5	L	PC	Pie	.....	Zen	V	Spl	Opt	P. B&B	Own FP	A	3	Own	Own D-2	W	½	7.25	32.5	B	Own FTT	Tut	Ros	Std	....	3350						
Garford 30	2590	144	P 32x6	P 32x6	Bud KTU	4-4x5¼	25.6	L	PC	Non	Own	Zen	G	A-L	A-L	P. Own	Own	A	3	Spi	Tim 6462	W	½	6.00	24.0	A	Own	Per	Ros	Day	Fir	4450						
§Gary G15	2690	144	S 36x4	S 36x7	Bud KBU-1	4-4x5¼	25.6	L	PC	.....	Chi	Str	V	Eis	Non	D. Ful	Ful TU-3	U	3	Blo	Tim 6462	W	½	7.75	23.7	A	Tim 1520	Det	Ros	Pru	Gdy	4500						
G. M. C. K-32		154	P 36x6	P 36x6	Own K32	4-3¼x6	20.3	L	FP	Own	McC	Mar	G	Eis	Rem	P. B&B	Own K-32	U	3	U-M	Own K-32	B	¾	7.12	27.65	E	Own K-32	Own	Own	Kel	....	3686						
Gotfredson 30 B		144°	P 32x6	P 32x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	McC	Zen	V	RBo	Rem	P. B&B	B-L 31	U	3	Spi	Cla B501	B	½	6.28	30.0	A	Sal 1546E	Det	Gem	Van	Fir	3500						
Graham Bros. CB	1245	140	P 34x5	P 36x6	Dodge	4-3⅞x4½	24.1	L	PS	Non	McC	Dod	V	N-E	N-E	D. Dod	Dod	U	3	U-P	Own	S	½	6.28	25.98	A	Own	Det	Dod	StM	Fir	3115						
Graham Bros. FB		158	P 34x5	P 36x6	Dodge	4-3⅞x4½	24.1	L	PS	Non	McC	Dod	V	N-E	N-E	D. Dod	Dod	U	3	U-P	Own	S	½	6.28	25.98	A	Own	Det	Dod	StM	Fir	3155						
Graham Bros. MB	1295	140	P 32x6	P 32x6	Dodge	4-3⅞x4½	24.1	L	PS	Non	McC	Dod	V	N-E	N-E	D. Dod	Dod	U	3	U-P	Own	S	½	5.5	22.7	A	Own	Det	Dod	StM	Fir	3130						
Graham Bros. LB		158	P 32x6	P 32x6	Dodge	4-3⅞x4½	24.1	L	PS	Non	McC	Dod	V	N-E	N-E	D. Dod	Dod	U	3	U-P	Own	S	½	5.5	22.7	A	Own	Det	Dod	StM	Fir	3170						
Graham Bros. EB		124	P 32x6	P 34x7	Dodge	4-3⅞x4½	24.1	L	PS	Non	McC	Dod	V	N-E	N-E	D. Dod	Dod	U	3	U-P	Own	S	½	6.28	25.98	A	Own	Det	Dod	Cla	Fir	3120						
§Gramm-Bernstein 115		146	P 30x5	P 30x5	Lyc C4W	4-4x5	25.6	L	PC	Non	Own	Zen	G	A-L	A-L	D. Ful	Ful SU12	U	3	Blo	Cla B501	B	½	6.28	25.12	B	Col 5300	Per	Ros	Cla	Fir	3650						
Gramm-Kincaid 343N		133	S 30x5	S 30x5	Lyc CT	4-3¾x5	22.5	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1002	B	½	5.33	21.3	B	Col 5300	Mat	Ros	Ind	Fir	3485						
Gramm-Kincaid 363N		133	S 30x5	S 30x5	Con 8R	6-3⅝x4½	27.3	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1002	B	½	5.33	21.3	B	Col 5300	Mat	Ros	Ind	Fir	3585						
Grass Premier 45	1850	140	P 30x5	P 32x6	Lyc C	4-4x5	25.6	L	PC	Opt	Chi	Str	V	Opt	Bos	D. B-L	B-L 31	U	3	Spi	Tim 5620	S	F	6.28	26.2	B	Con	Det	Ros	Van	Fir	3300						
Grass Premier 60	2400	144	S 34x5	S 34x6	Wau FU	4-4x5¾	25.6	L	....	Opt	Chi	Str	V	Opt	Bos	D. B-L	B-L 35	U	4	Spi	Tim 6462	W	½	7.25	36.2	B	Con	Det	Ros	StM	Fir	4400						
Guilder D-6		142	P 32x6	P 32x6	Con 8R	6-3⅝x4½	27.3	L	PC	Pie	G&O	Zen	G	Eis	Bos	D. B-L	B-L 31	U	3	M-E	Cla 501	B	½	5.50	26.0	...	Shu 5410	Mer	Ros	Van	Non	3250						
Hahn O	2100	134°	P 32x6	P 32x6	Her OX	4-4x5	25.6	L	FP	Non	Chi	Str	G	Bos	L-N	D. B-L	B-L	U	3	Spi	Wis 42	R	½	6.50	.....	A	Wis 11	She	Ros	Opt	Opt	3800						
§Indiana 14A		117¼	P 30x5	P 34x7	Her OX	4-4x5	25.6	L	PC	Non	Lon	Str	G	Eis	Non	P. B&B	B-L 31	U	3	Blo	She W-1501	W	½	6.50	31.2	A	She 33FA500	She	Ros	Bim	Fir	3600						
Indiana 15		145°	S 34x4	S 34x6	Her OX	4-4x5	25.6	L	PC	Non	Lon	Str	G	Eis	A-L‡	P. B&B	B-L 35	A	3	Spi	She W-1501	W	½	6.50	31.2	A	She 33FA500	Bea	Ros	Bim	.....	4113						
Int. Harvester 33		128	S 36x4	S 36x6	Own 33	4-3¾x5	22.5	H	SP	Own	Own	Own	G	RBo	Non	D. Own	Own 33	A	3	Own	Own 33	I	D	8.00	32.5	A	Own 33	.....	Own	.....	.....	4070						
Int. Harvester SD		110	P 30x5	P 32x6	Lyc KB	4-3½x5	19.6	L	PC	Non	Lon	Zen	G	Rem	Rem	P. Lon	Own	U	3	M.M.	Eat	B	½	6.37	25.5	A	Eat	.....	CAS	.....	.....	3000						
Int. Harvester SL		150	P 30x5	P 30x5	Lyc KB	4-3½x5	19.6	L	PC	Non	Lon	Zen	G	Rem	Rem	P. Lon	Own	U	3	M.M.	Eat	B	½	6.37	25.5	A	Eat	.....	CAS	.....	.....	3270						
Kearns O		136°	S 32x6	DS32x6‡	Her OX	4-4x5	25.6	...	SP	.....	Own	Zen	...	A-L	A-L	D. Ful	Ful	U	3	.....	She	W	½	.....	.....	...	.....	.....	Ros	.....	.....	3900						
Kelly-Springfield K70	2900	150	S 36x4	S 36x7	Con K4	4-4½x5¼	27.2	L	FP	Pie	Own	Zen	G	Eis	Opt	P. B&B	B-L 51	A	4	Spi	Own	W	½	6.80	36.4	A	Own	Mat	Ros	StM	Non	5887						
Kenworth OL	2250	140	S 30x5	S 30x5	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	Own	Zen	V	Rem	Rem	D. B-L	B-L 31	U	3	Spi	She W1501	W	½	7.80	37.5	A	She 33FA500	Lah	Ros	Smi	Fir	4200						
King Zeitler 30		140°	S 34x5‡	S 34x6‡	Con S4	4-4¼x4½	28.9	L	FP	Mon.	Chi	Str	G	Eis	Bos‡	D. B-L	B-L 31	U	3	Pic	Tim 6258	W	½	6.75	32.4	A	Tim 1460	Mar	Ros	StM	Fir	3750						
Kissel		152	S 36x4‡	S 36x6‡	Own 40000	4-3⅞x5½	24.1	L	SP	Pie	McC	Str	V	Eis	Rem‡	D. W-G	W-G T-38L	U	3	Spi	Tim 6462	W	½	7.80	28.5	A	Tim 1526	Mat	Ros	Pru	Std	4100						
Kleiber	3100	147	S 36x4‡	S 36x7‡	Con K4	4-4½x5¼	27.2	L	FP	Non	R-T	Str	V	RBo	Non	D. B-L	B-L 50	A	4	Spi	Tim 6462	W	½	7.75	41.5	A	Tim 1544B	Bet	Ros	Smi	.....	4300						
Lange 1½	2950	145°	S 34x4‡	S 34x6‡	Con J4	4-3¾x5	22.5	L	FP	Non	Own	Str	V	Apo	Non	D. B-L	B-L 35	U	4	Pet	Tim 6462A	W	½	8.75	46.8	A	Tim 1526	S.P	Ros	Hoo	Opt	4925						
§Larrabee-Deyo X-21		138°	S 32x6	S 32x6	Con 8R	6-3⅝x4½	27.3	L	FP	Opt	Fed	Zen	G	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 5620	B	F	5.37	25.8	A	Tim 1250	She	Gem	Smi	Fir	3550						
LeMoon GP1-1½		Opt	S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	FP	Non	Chi	Str	G	Bos	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	7.75	.....	A	Tim 1452	Tut	Ros	StM	Non	3400						
Mack AB		146½°	S 36x4	DS36x3½	Own AB	4-4x5	25.6	L	PS	Own	Own	Str	G	Spi	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	*6.99	33.8*	B	Own AB	Mer	Own	.....	.....	.....						
Mack AB		146½°	S 36x4	DS36x3½	Own AB	4-4x5	25.6	L	PS	Own	Own	Str	G	Spi	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	R	F	*7.60	36.8*	B	Own AB	Mer	Own	.....	.....	.....						
Master 21	2290	142	S 34x4	S 36x7	Bud KBU-1	4-4x5¼	25.6	L	PC	Pie	Chi	Zen	V	Eis	Non	D. Ful	Ful SU	U	3	Spi	Tim 6462	W	½	Opt	Opt	A	She 550	Mer	Ros	Pru	.....	4300						
Menominee H		144	S 36x3½‡	S 36x5‡	Wis SU	4-4x5	25.6	H	PC	Mon	Own	Zen	V	Eis	Bos	D. Det	Cot AAU	U	3	Spi	Wis 800H	W	½	8.25	30.3	A	Shu 510	Tut	Ros	Std	Fir	4220						
Moreland RR6	1595	156	P 30x5	P 30x5	Con 11U	6-3¼x4⅝	25.3	L	FP	Non	Lon	Str	...	A-L	A-L	D. B-L	B-L 31	U	3	Pet	Tim	B	F	5.37	25.8	...	Tim	U.S.	Ros	Smi	Fir	3500						
National 10	2785	153	P 32x6	P 32x6	Wau V	4-4x5	25.6	L	PC	Non	McK	Zen	G	Bos	Bos	D. B-L	B-L 30	U	3	Spi	Tim 6460	W	½	7.00	23.3	A	Tim 1520	Mat	Ros	Van	Fir	4200						
Netco A	2600	144°	P 32x6	P 32x6	Her O	4-4x5	25.6	L	PC	Opt	Bus	Zen	V	Bos	Bos	D. B-L	B-L 35	U	3	Pet	Tim 6462	W	½	6.25	25.0	A	Tim 1460	Mat	Gem	StM	Gdy	4500						
§Noble A-21	2240	144	S 32x6	S 34x7	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Chi	Str	V	Spl	Bos	D. Ful	Ful LTU4	U	3	Blo	She 1501	W	½	6.50	26.0	...	Shu 310	Tut	Ros	Bim	Fir	3800						
O. K	1750	149	S 36x3½	S 36x5	Bud CTU	4-3¾x5¼	22.5	L	PC	Non	Own	Zen	V	Eis	Non	D. Ful	Ful LTU3	U	3	Har	Wis 800H	W	½	9 33	.....	...	Shu 510	Tut	Ros	Bim	Gdy	4100						
Patriot 30		144	S 36x4	S 36x7	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Zen	V	Bos	Non	D. B-L	B-L 35	A	4	The	Tim 6462	W	½	6.50	34.8	A	Shu	Mar	Ros	Bim	Fir	4250						
Pendell B (low bed)	2800	156	P 30x5	P 32x6	Her	4-4x5	25.6	L	PC	Non	Own	Str	G	A-L	A-L	D. Ful	Ful SU12	U	3	The	Own	C	D	6.8	27.4	B	Own	Own	Jac	Own	Gdy	4800						
Rainier RW46		152	S 34x4	S 34x5	Con K4	4-4½x5¼	27.2	L	FP	Pie	Bus	Zen	G	RBo	Del	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.75	32.4	A	Tim 1452	She	Ros	Van	.....	4480						
Rainier R46		152	S 34x4	S 34x7	Con K4	4-4½x5¼	27.2	L	FP	Pie	Bus	Zen	G	RBo	Del	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	½	7.25	34.8	A	Tim 1452	She	Ros	Van	.....	4560						
Republic 85		146°	S 34x4	S 34x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Per	Str	V	Bos	Bos	D. Ful	Ful	U	3	U-M	Eat	I	D	6.28	25.0	B	Eat	Mat	Lav	Bim	Fir	3400						
Ruggles 22		148	P 30x5	P 32x6	Her O	4-4x5	25.6	L	PC	Non	Per	Zen	G	Rem	Rem	D. B-L	B-L 31	U	3	Spi	Col 53000	B	¾	5.12	28.1	A	Col 5300	Det	Jac	Nor	Fir	3600						
Rumely A	2150	144	S 36x3½‡	S 36x5‡	Bud CTU	4-3¾x5¼	22.5	L	PC	Pie	Mod	Str	G	Eis	Bos‡	D. Ful	Ful LTU 5	U	3	Blo	She 1501W	W	½	7.80	.....	A	Shu 510	.....	Gem	.....	.....	4050						
Sandow		138	S 34x4	S 34x6	Bud WTU	4-3¾x5⅛	22.5	L	PS	Non	Chi	Str	V	Eis	Non	D. Ful	Ful TU3¾	U	3	Spi	She 1501W	W	½	7.75	.....	...	.....	.....	Ros	Opt	Fir	3595						
Sanford W6-15		151	P 32x6	P 32x6	Con 8R	6-3⅝x4½	27.3	L	PC	Non	R-T	Str	G	Con	Dyn‡	D. Ful	Ful SU10	U	3	Spi	She 1501	W	½	7.8	31.2	A	She 33FA	She	Ros	Van	Gdy	3665						
Schacht H	2500	144	S 34x4	S 34x7	Wis SU	4-4x5	25.6	H	PC	Non	Own	Zen	V	Bos	Non	D. Ful	Ful GU7	U	4	Blo	Wis 660D	R	F	7.00	33.6	A	Shu 510	She	Ros	.....	.....	4500						
Service		151¼	S 36x4	S 36x7	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	Eis	Rem	P. B&B	B-L 35	A	4	Spi	Tim 6460	W	...	7.75	41 5	A	Tim 1526	She	Ros	Int	Fir	5350						
Standard 1½K		144°	S 34x4	S 34x5	Con J4	4-3¾x5	22.5	L	PS	Sim	Lon	Str	V	Eis	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.75	32.4	A	Tim 1452	Per	Gem	StM	Fir	3466						
Sterling DW-8		142	S 32x6	S 32x6	Own V	4-4x5	25.6	L	PC	.....	Own	Zen	V	Eis	.....	D. B-L	B-L 31	U	3	Spi	Tim	W	½	5.0	24.0	...	Tim	Mat	Ros	.....	.....	4000						
Stewart 17	1695	145	S 32x6	S 32x6	Lyc C	4-4x5	25.6	L	PC	Non	Own	Zen	G	Rem	Rem	D. Ful	Ful LTU4	U	3	Spi	Cla B-501	B	¾	6.25	25.1	B	Col 7003	Det	Ros	Cla	Fir	3200						
Stewart 17X	1795	145	P 32x6	P 32x6	Lyc	6-3¼x4½	25.3	L	FP	Non	Own	Zen	G	Rem	Rem	D. Ful	Ful	U	3	.....	Cla	B	½	6.25	25.1	A	.....	.....	Gem	.....	Fir	3450						
Stoughton B		140	S 36x3½	S 36x5	Wau	4-3¾x5¼	22.5	L	SP	Wau	Own	Str	G	Eis	.....	. B-L	B-L 30	U	3	Spi	She 1501	W	½	7.8	20.8	..	Shel 33FA500	Own	Ros	Bim	Gdy	3800						
Stoughton BJ		140	S 34x5	S 34x5	Own	6-3⅝x5	31.5	H	FP	Non	Chi	Zen	V	Bos	Bos	D. B-L	B-L 30	U	3	Opt	Col 53000	S	¾	5.87	25.3	A	Col 5300	Own	Ros	Bim	Gdy	3250						
Traylor B	1800	140	S 34x3½	S 34x6	Bud WU	4-3¾x5⅛	22.5	L	PC	Non	G&O	Zen	G	Spl	Wes†	D. Cov	Cov MUSC	U	3	M-E	She W-1501	W	½	7.80	28.0	A	She 33FA500	Mer	Ros	Sch	.....	4300						
§Union E		150	P 34x7	P 34x7	Wis Y	6-3⅝x5	27.3	L	PC	Non	G&O	Zen	V	Bos	Bos	D. Ful	Ful GU-14	U	4	U-M	Wis 460	R	½	6.0	28.8	B	Shu 5410	Mat	Jax	Ind	Fir	4420						
§United 30		148	P 34x5	P 34x5	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Bos	Bos	D. B-L	B-L 31	U	3	Blo	Col 53000	B	¾	5.80	23.7	A	Shu 310	Det	Lav	Van	Fir	2940						
§U. S. N	1950	144°	S 36x3½	S 36x6	Bud	4-3¾x5⅛	22.5	L	PC	Non	Own	Str	V	Bos	Bos*	D. Ful	Ful LTU5	U	3	Blo	Cla I-D	I	D	7.60	30.4	A	Shu 350	She	Lav	Sch	.....	4070						
Victor 40	1995	135	S 34x3½‡	S 34x5‡	Her OX	4-4x5	25.6	L	PC	Non	Per	Zen	G	Eis	.....	D. Ful	Ful SU12	U	3	U-M	Wis 51	R	½	6.1	24.0	A	Shu 5410	Det	Lav	Smi	.....	4010						
Wachusett J		148	S 36x6	S 36x6	Con J4	4-3¾x5	22.5	L	FP	Non	G&O	Zen	V	Bos	Bos	D. B-L	B-L 35	U	4	Har	Tim 6352	W	¾	7.20	38.5	...	Tim 1452	Sav	Ros	Smi	Fir	3300						
Wilcox BB	2550	135	S 36x4	S 36x5	Own BD	4-4¼x5	28.9	L	SP	Dup	.....	Str	G	Bos	Wes	D. Own	Own Q	A	4	Own	Wal 2A	R	½	8.25	29.9	B	Shu 550	She	Own	.....	Non	4600						
Wichita 30U		144	S 36x3½	S 36x6	Wau BUX	4-3¾x5¼	22.5	...	PS	.....	.....	.....	...	.....	.....	D. B-L	B-L	U	4	The	She	W		7.8	.....	A	She	Own	Ros	.....	.....	.....						
Winther-Kenosha 15	1350	136	P 30x5	P 32x6	Northway	4-3⅛x5	23.4	L	PS	Non	Chi	Str	V	Rem	Rem	P. B&B	Dur	U	3	Pet	Tim	S	F	6.43	24 1	A	Col	Mat	Ros	Van	Fir	3000						
Witt-Will N	2575	144	S 34x3½	S 34x6	Con S4	4-4¼x4½	28.9	L	PC	Pie	Own	Zen	G	Eis	Non	D. B-L	B-L 35	U	3	Spi	Tim 6460	W	½	7.00	30.3	A	Tim 1520	She	Ros	Arc	Fir	4000						

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Trade Name and Model	General				Engine								Electrical System		Clutch	Gearset			Universals (Make)	Rear Axle			Gear Ratios		Brakes, Location	Front Axle Make and Model	Springs (Make)	Steering Gear (Make)	Wheels (Make)	Rims (Make)	Chassis Weight (lbs.) (stripped)
	Chassis Price	Standard Wheelbase (inches)	Tire Size: Front (inches)	Tire Size: Rear (inches)	Make and Model	Number of Cylinders Bore and Stroke	N.A.C.C. Rated H.P.	Valve Arrangement	Oiling System	Governor (Make)	Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Ignition System (Make)	Generator and Starter (Make)	Type and Make	Make and Model	Location	No. of Forward Speeds		Make and Model	Final Drive	Type	Total Reduction in High	Total Reduction in Low						
2 Ton																															
Acme 41	....	150	S 34x4	S 34x8	Con S4	4-4¼x4½	28.9	L	FP	Mon	Per	Zen	V	Bos	.....	D. B-L	B-L	U	4	Blo	Tim 6462	W	½	7.00	36.4	A	Tim 1526	Det	Ros	Bim	.....	4650
Acorn	2500	144	S 36x4	S 36x7	Con S4	4-4¼x4½	28.9	L	PC	Non	Ch	Zen	G	RBo	.....	D. Ful	Ful SU12	U	3	Spi	Cla B750	S	½	7.00	28.0	A	Shu 350	Tut	Ros	.....	.....	4600
Autocar F	....	97	S 34x4‡	S 34x6‡	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.30	33.2	A	Own F	Del	Ros	Hoo	.....	3900
Autocar G	....	120	S 34x4‡	S 34x6‡	Own	2-4¾x4½	18.1	L	SP	Non	Own	Str	G	Bos	.....	P. Own	Own F	A	3	Spi	Own F	R	F	8.30	33.2	A	Own F	Del	Ros	Hoo	.....	3900
Autocar FH	....	114	S 34x5‡	S 34x7‡	Own H	4-4x5½	25.6	L	SP	Pha	Own	Str	G	Bos	L-N*	P. Own	Own Y	A	4	Spi	Own H	R	F	7.03	42.2	A	Own FH	Opt	Ros	Hoo	.....	5100
Autocar GK	....	138	S 34x5‡	S 34x7‡	Own H	4-4x5½	25.6	L	SP	Pha	Own	Str	G	Bos	L-N*	P. Own	Own Y	A	4	Spi	Own H	R	F	7.03	42.2	A	Own FH	Opt	Ros	Hoo	.....	5200
Available L-2	....	152	S 36x4	S 36x6	Her O	4-4x5	25.6	L	PC	Pie	Chi	Zen	G	Bos	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6466	W	½	7.25	36.	A	Shu 550	Tut	Ros	Bim	Non	4750
§Bethlehem GN	2495	137½	S 36x4	S 36x7	Own GN	4-4x5¼	25.6	L	PC	Pie	Bus	Zen	V	Bos	G&D	P. B&B	Ful	U	4	Spi	Wis 60A	R	½	7.75	37.2	A	She D343	Mat	Lav	Smi	.....	4100
Brockway S	....	140	S 34x4	S 34x6‡	Wis SU	4-4x5	25.6	H	FP	Han	Bus	Zen	V	Eis	L-N	D. B-L	B-L 30	U	3	Spi	Tim 6462	W	¾	7.25	.....	A	Tim 1452	She	Ros	Hoo	Non	4050
Brockway SK	....	147	S 34x4	S 34x6‡	Con K4	4-4½x5¼	27.2	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 35	U	4	Spi	Tim 6462	W	¾	7.25	.....	A	Tim 1452	She	Ros	Hoo	Non	4200
Brockway SY	....	150	P 32x6	P 34x7	Wis 6Y	6-3⅜x5	27.3	H	FP	Non	G&O	Zen	V	Eis	L-N	D. B-L	B-L 35	A	4	Spi	Wis 460	R	F	6.3	.....	A	Col	She	Gem	Van	Fir	5000
Buck 44	....	160°	S 36x4‡	S 36x7‡	Con S4	4-4¼x4½	28.9	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 35	U	4	Spi	Tim 6462	W	½	8.75	42.0	A	Tim 1460	Mat	Ros	Smi	Fir	5000
Buck 46	....	160°	S 36x4‡	S 36x7‡	Con 8R	6-3⅜x4½	27.3	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	½	8.75	42.0	A	Tim 1460	Mat	Ros	Smi	Fir	4800
Casco C	2700	130	S 32x6	S 36x8	Bud WTU	4-3⅞x5⅛	22.5	L	PC	Non	G&O	Zen	V	Bos	Bos	D. Ful	Ful GU 12	U	4	Spi	Wis 66A	R	½	7.75	37.2	A	Wis 10A	Per	Woh	Arc	Fir	4650
Casco D	2950	170	S 32x6	S 36x8	Bud WTU	4-3⅞x5⅛	22.5	L	PC	Non	G&O	Zen	V	Bos	Bos	D. Ful	Ful GU 12	U	4	Spi	Wis 66A	R	½	7.75	37.2	A	Wis 10A	Per	Woh	Arc	Fir	4850
§Clinton 45	....	163	S 34x4‡	DS34x4‡	Wau V	4-4x5	25.6	L	PC	Wau	Own	Zen	G	Bos	Bos	D. B-L	B-L 35	A	4	Blo	Tim 6462	W	½	7.75	41 5	A	Tim 1520	Per	Ros	StM	.....	4875
Commerce S14	....	146	S 36x4	S 36x7	Con S4	4-4¼x4½	28.9	L	FP	Non	Lon	Zen	V	Bos	Bos	D. B-L	B-L 35	A	4	Blo	Tim 6462	W	½	7.00	37.4	A	Tim 1460	Bea	Ros	.....	Fir	4245
Concord G	3250	140	P 36x6	S 36x8	Bud WTU	4-3⅜x4½	25.6	L	PC	Pie	Own	Zen	V	Eis	Non	D. B-L	B-L 35	U	4	Spi	Tim 6566	W	½	9.25	49.4	A	Tim 1544	.....	Ros	Arc	Fir	4150
Concord H	3700	150	P 36x6	P 38x7	Bud EBU	4-4¼x4½	28.9	L	PC	Non	Own	Zen	V	Eis	Bos	D. B-L	B-L 51	U	4	Spi	Tim 6460	W	½	6.5	36.1	A	Tim 1520	.....	Ros	Arc	Fir	4250
Corbitt 40	....	148	P 36x6	S 36x7	Con S4	4-4¼x4½	28.9	L	FP	Non	MeC	Zen	V	Bos	Bos	D. B-L	B-L 35	U	3	Spi	She W 103	W	½	8.66	35.6	A	She 3FA10	She	Ros	Smi	Fir	5195
Corbitt C	....	148	S 36x4‡	S 36x7‡	Con K4	4-4½x5¼	27.2	L	FP	Sim	MeC	Str	V	Eis	Bos‡	D. B-L	B-L 35	U	3	Spi	She W-103	W	½	10.6	35.6	A	She 3FA10	She	Ros	Bim	Fir	5265
Day-Elder H	....	144°	S 34x4‡	S 34x5‡	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	Bus	Zen	V	Eis	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	½	7.75	37.2	A	Tim 1460	I.C.	Gem	Van	Fir	4300
Day-Elder HST	....	144°	S 34x4‡	S 34x6‡	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	Bus	Zen	V	Eis	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	½	7.75	37.2	A	Tim 1460	I.C.	Gem	Van	Fir	4300
Day Elder HSM	....	144°	S 34x4‡	S 34x5‡	Bud KBU	4-4x5¼	25.6	L	PC	Non	Bus	Zen	V	Eis	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	½	7.75	37.2	A	Tim 1460	I.C.	Gem	Van	Fir	4500
Day Elder HSMT	....	144°	S 34x4‡	S 34x6‡	Bud KBU	4-4x5¼	25.6	L	PC	Non	Bus	Zen	V	Eis	Bos‡	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	½	7.75	37.2	A	Tim 1460	I.C.	Gem	Van	Fir	4500
Defiance E2	....	140	S 35x5	S 38x7	Con J4	4-3⅞x5	22.5	L	PC	Non	Chi	Zen	V	Bos	Bos	D. Ful	Ful GU10	U	4	Har	Wis 66	R	½	9.25	44.4	A	Col 7000	Det	Lav	StM	Fir	3865
Dixon	2800	136	S 34x4	S 34x7	Con S4	4-4¼x4½	28.9	L	FP	Pie	G&O	Zen	V	Bos	Bos	D. Ful	Ful GU7	U	4	Spi	Tim 6462	W	½	.....	.....	A	Tim 1520	S.P	Ros	StM	Fir	4450
Duplex A	....	160	S 34x4‡	DS36x7‡	Hin HAA	4-4x5¼	25.6	L	PC	Non	Mod	Str	V	Eis	Wes	D. Cov	Cov RU3C	U	3	Pet	She W-103	W	½	7.75	30.0	A	She D343	Pen	Ros	Mot	Fir	4400
Eagle 104	....	130°	S 34x4‡	S 34x8	Bud KTU	4-4x5¼	25.6	L	PC	Non	Own	Zen	G	Eis	Non	D. Cov	Cov MUC	U	3	M-E	Rus 6005-I	I	D	8.31	.....	A	Col 7000	Cha	Ros	StM	Fir	1300
Fageol 235	3750	150	S 36x4	DS34x7‡	Wau FU	4-4x5¾	25.6	L	PC	Wau	Own	Zen	V	Bos	Bos	D. B-L	Own A	U	7	Spi	Tim 6462	W	¾	5.60	59.7	A	Tim1460DXZ	Mat	Ros	Van	.....	5500
Federal S1	....	144	S 34x4	S 34x5	Kni	4-3⅝x4½	21.0	..	PC	Non	Own	Zen	V	A-L	A-L	P. B&B	Own	A	4	U-M	Tim 6462	W	½	7.25	36.2	A	Own	Mat	Gem	Mot	.....	2300
Gotfredson 41	....	146½°	S 36x4‡	S36x8‡	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	MeC	Zen	V	RBo	Rem	P. B&B	B-L 35	U	4	Spi	Tim 6462	W	½	7.25	38.7	A	Tim 1460	Det	Gem	Smi	Fir	5300
Gotfredson 46	....	156½°	S 36x4‡	S 36x8‡	Bud BUS	6-4x5⅛	38	4	L	PC	Non	MeC	Zen	V	RBo	Rem	P. B&B	B-L 35	U	4	Spi	Tim 6462	W	½	7.25	38.7	A	Tim 1460	Det	Gem	Smi	Fir	5500
Gramm Bernstein 115S	....	149½°	P 30x5	P 30x5	Con 11U	6-3¼x4⅝	25.3	L	PC	Non	Own	Zen	G	A-L	A-L	D. Ful	Ful SU12	U	3	Blo	Cla B501	B	½	6.28	25.12	B	Col 5300	Per	Ros	Cla	Fir	3750
Gramm-Kincaid 443N	....	133°	P 32x6	P 32x6	Lyc C4	4-4x5	25.6	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1502	B	½	6.33	25.3	B	Col 5300	Mat	Ros	.....	Fir	.....
Gramm-Kincaid 463N	....	133°	P 32x6	P 32x6	Con 8R	6-3⅜x4½	27.3	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Eat 1502	B	½	6.33	25.3	B	Col 5300	Mat	Ros	.....	Fir	.....
Grass Premier 70	2550	144	S 34x5	S 34x7	Wau FU	4-4x5¾	25.6	L	PC	Opt	Chi	Str	V	Eis	Eis	D. B-L	B-L 35	U	4	M-E	Wis 660	R	F	7.25	36.2	B	Con	Det	Ros	Bim	Fir	4400
Guilder E	....	152	S 34x4	S 36x8	Bud KBU-1	4-4x5¼	25.6	L	PC	Pie	G&O	Zen	G	Eis	Bos	D. B-L	B-L 51	U	4	M-E	Wis 660	W	F	7.75	41.0	..	Shu 5410	Mer	Ros	Van	Non	5100
Hahn K	....	142°	S 36x4	S 36x7	Con K4	4-4½x5¼	27.2	L	FP	Pha	Chi	Str	G	Bos	Del	D. B-L	B-L	U	4	Spi	Tim 6560	W	F	8.75	.....	A	Tim 1526	Mer	Ros	Opt	Opt	4700
Hug HA4	....	118	P 34x5	DP34x5	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	Per	Zen	V	Spl	.....	D. Ful	Ful	U	3	Blo	Wis	R	½	7.2	28.8	A	Wis	Tut	Ros	Van	Fir	3670
Int. Harvester 43	....	130	S 36x4‡	S 36x7‡	Own 43	4-4¾x5	22.5	H	SP	Own	Own	Own	G	RBo	Own	D. Own	Own 43	U	4	Own	Own 43	I	D	9.00	53.1	B	Own 43	.....	Own	Own	.....	4790
Kearns N1	....	136°	S 34x4	DS34x7‡	Her O	4-4x5	25.6	..	SP	.....	Own	Zen	..	Bos	.....	D. Ful	Ful	U	3	.....	She	W		.....	.....	.....	.....	.....	Ros	.....	.....	.....
Kenworth M	3100	150	S 36x4	S 36x7	Bud KBU	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	RBo	Rem	D. B-L	B-L 35	U	4	Spi	She W-103	W	½	7.75	46.8	A	She D343	Lah	Ros	Smi	.....	5600
King Zeitler 40	....	156°	S 34x5‡	S 34x7‡	Con S4	4-4¼x4½	28.9	L	PC	Mon	Chi	Str	G	Eis	Bos‡	D. B-L	B-L 31	U	3	Pic	Tim 6462	W	½	7.75	37.2	A	Tim 1526	Mar	Ros	StM	Fir	4300
King Zeitler 42A	....	156°	P 32x6	P 34x7	Con 6M	6-3⅜x4½	27.3	L	PC	Non	Chi	Str	G	Bos	Bos	D. B-L	B-L 31	U	3	Pic	Tim 5620	B	F	6.43	30.9	A	Tim 1460	Mar	Ros	StM	Fir	3750
§Larrabee XJ	....	168	S 34x7	S 34x7	Con 8R	6-3⅜x4½	27.3	L	PC	Opt	Fed	Zen	G	Bos	Bos	D. B-L	B-L 31	U	3	Spi	She W-1501	W	½	7.80	37.3	A	She D 485	She	Ros	Smi	Fir	4200
Lehigh S4	....	146	P 32x6	P 32x6	Her O	4-4x5	25.6	L	FP	Non	Per	Zen	V	Bos	Bos	D. Cov	Cov JUC	U	3	Pet	Eat 1502	B	½	6.3	22.8	A	Eat 750	Mat	Ros	Van	Fir	3300
Lehigh S-4L	....	170	P 32x6	P 34x7	Her O	4-4x5	25 6	L	....	Non	Per	Zen	V	Bos	Bos	D. Cov	Cov JUC	U	3	Pet	Eat 1502	B	½	6.3	22.8	A	Eat 750	Mat	Ros	Van	Fir	3585
Lehigh S-4L	....	170	P 32x6	P 34x7	Her O	4-4x5	25 6	L	....	Non	Per	Zen	V	Bos	Bos	D. Cov	Cov JUC	U	3	Pet	Eat 1502	B	½	6.3	22.8	A	Eat 750	Mat	Ros	Van	Fir	3500
Lehigh 6-S	....	146	P 32x6	P 32x6	Bud HS-6	6-3⅜x4½	27.3	L	....	Non	Per	Zen	V	A-L	A-L	D. Cov	Cov JUC	U	3	Pet	Eat 1502	B	½	6.3	22.8	A	Eat 750	Mat	Ros	Van	Fir	3750
Lehigh 6-SL	....	175	P 32x6	P 34x7	Bud HS-6	6-3⅜x4½	27.3	L	....	Non	Per	Zen	V	Bos	Bos	D. Cov	Cov RUP	U	4	Pet	Wis 70	R	½	6.92	35.98	A	Shu 5410	Mat	Ros	Van	Fir	4000
Lehigh SR	....	105	P 32x6	P 34x7	Her O	4-4x5	25.6	L	....	Non	Per	Zen	V	Bos	Bos	D. B-L	B-L 31	U	3	Spi	Tim 6462	W	½	7.75	.....	A	Tim 1520	Tut	Ros	StM	.....	6300
Le Moon GP-2	....	Opt	S 34x4	S 34 7	Con S4	4-4¼x4½	28.9	L	FP	Non	Chi	Str	G	Bos	Bos	D. B-L	B-L 35	U	4	Pic	Wis 70	R	½	5.35	36.9	A	Shu 5410	Row	Ros	Van	Gdy	4700
Maccar 46	....	150	S 32x6	S 34x7	Wis Y	4-3⅜x5	27.3	L	PC	Non	Own	Zen	V	Rem	Rem	D. B-L	B-L 35	U	4	Spi	Own AB	C	D	*6.99	33 8*	B	Own AB	Mer	Own	.....	.....	.....
Mack AB	....	146½°	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	R	F	*7.60	36.8*	B	Own AB	Mer	Own	.....	.....	.....
Mack AB	....	146½°	S 36x4	DS 36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	W	½	7.25	34.8	..	Tim	U.S.	Ros	Smi	Fir	3850
Moreland BX6	2000	156	S 36x4	S 36x8	Con 11U	6-3¼x4⅝	25.3	L	FP	Non	Lon	Str	V	A-L	A-L	. B-L	B-L 31	U	3	Pet	Tim	I	D	9.00	39.0	B	Own 3018	Har	Lav	A-W	.....	3850
§Nash 3018	2150	144	S 34x4‡	S 34x7‡	Own 4	4-3⅜x5½	22.5	L	PS	Sim	.....	Str	G	Eis	A-L	P. B&B	D-G C	U	4	Own	Cla 2D	I	D	9.00	39.0	B	Own 3018	Har	Lav	A-W	.....	3850
National 20	3235	157	P 32x6	P 32x6	Wau V	4-4x5	25.6	L	PC	Non	McK	Zen	G	Bos	Bos	D. B-L	B-L 30	U	3	Spi	Tim 6460	W	½	7.00	23.3	A	Tim 1520	Mat	Ros	Van	Fir	4300
National 21	3400	168	P 32x6	P 32x6	Wau V	4-4x5	25.6	L	PC	Non	McK	Zen	G	Bos	Bos	D. B-L	B-L 35	U	4	Spi	Tim 6460	W	½	7.00	37.4	A	Tim 1520	Mat	Ros	Van	Fir	4500
Noble B31	2900	160	S 36x4‡	S 36x7‡	Bud KTU	4-4x5¼	25.6	L	PC	Pie	Chi	Str	V	Spl	Bos	D. Ful	Ful GU14	U	4	M-E	She 103	W	½	8.66	41.5	A	She D-343	Tut	Lav	Bim	Fir	4850
O. K	2850	149	S 36x3½	S 36x5	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	Eis	Non	D. Ful	Ful GU14	U	4	Har	Tim 6462	W	½	9.25	.....	A	Shu 510	Tut	Ros	Bim	Gdy	4310
Oshkosh AW	3080	130	P 36x6	P 36x6	Wis SU	4-4x5	25.6	H	PC	Dup	Own	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Pet	Own A	B	F	8.00	33.0	A	Own A	Tut	Ros	Roy	Fir	4250
Oshkosh AAW	3180	165	P 36x6	P 36x6	Wis SU	4-4x5	25 6	H	PC	Dup	Own	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Pet	Own AA	B	F	8.00	33.0	A	Own AA	Tut	Ros	Roy	Fir	.....
Patriot 35	....	144	S 36x4	S 36x7	Hin 400	4-4x5¼	25.6	L	FP	Non	Own	Zen	V	Bos	....	D. B-L	B-L 35	A	4	The	Tim 6462	W	½	7.25	38.8	A	Shu	Mar	Ros	Bim	Fir	4400
Penn	2300	144	S 34x5	S 38x7	Bud WU	4-3¾x5⅛	21.0	L	PC	Non	G&O	Zen	G	Bos	Bos	D. Ful	Ful SU	U	3	Spl	She W1501	W	½	9.25	37.0	...	Tor AA3	Row	Ros	Smi	Gdy	3975
Pennford	925	138	S 30x3½	S 34x5	Himico	4-3¾x4	22.5	L	SP	Non	Ford	Hol	G	Ford	Ford	D. Hin	Hin	A	3	U-P	She W1002	W	½	7.75	.....	..	Ford	Row	Ford	Hoo	Gdy	2800
Pierce Arrow XA	3500	150	S 36x4‡	DS36x5‡	Own XA	4-4x5½	25.6	T	FP	Own	Own	Str	P	Del	Del	D. Own	Own XA	A	4	Spi	Own	W	½	8.5	44.2	A	Own XA	S.P	Own	.....	Opt	6280
Reo	1985	156	S 32x6	S 34x7	Own T6	6-3⅜x5	24.3	D	SP	Non	Own	Sch	V	N-E	N-E	D. Own	Own	A	3	Own	Own	S	½	5.7	25.14	A	Own	Pen	Own	Bud	Fir	3925
Rehberger A	....	162	S 36x4	S 36x7	Bud KTU	4-4x5¼	25.6	L	PC	K.P	Bus	Zen	G	RBo	Bos‡	D. B-L	B-L 35	U	4	Spi	Tim 6462	W	½	7.75	41.5	A	Shu 510	Del	Gem	Van	Fir	5060
Republic 15	....	153°	S 34x4	S 34x7	Con J4	4-3¾x5	22.5	L	FP	Pha	Own	Str	V	Bos	Bos‡	D. Ful	Ful	U	3	Spi	Eat	I	D	7.20	28.8	B	Eat	Mat	Jac	Van	Fir	4200
Republic 18W	....	153°	S 34x4	S 34x7	Wau V	4-4x5	25 6	L	FP	Wau	Own	Str	V	Bos	Bos‡	D. Ful	Ful	U	3	Spi	Eat	I	D	7.20	28.8	B	Eat	Mat	Jac	Van	Fir	4200

Ruggles 41	....	148	P 30x5	P 34x7	Her O	4-4x5	25.6	L	PC	Non	Per	Zen	G	Bos	Rem‡	D. B-L	B-L 31	U	3	Spi	Wis 660	R	F	7.00	37.4	A	Shu 5410	Det	Jac	Nor	Fir	4250
Sandow JS	....	144	S 36x4	S 36x7	Her OX	4-4x5	25.6	L	PC	Non	Chi	Str	G	Eis	Bos	D. Ful	Ful GU14	....	4	Spi	She W-103	W	D	8.66	.....	A	She 343	Ros	.....	.....	.....	4000
Schacht J	2600	158	S 34x4	S 34x7	Wis SU	4-4x5	27.3	L	PC	Non	Own	Str	V	Bos	Bos	D. Ful	Ful GU7	U	4	Blo	Wis 660D	W	D	7.00	33.6	A	Shu 510	She	Ros	Non	Non	4900
Schacht J	....	158	S 34x4	S 36x6	Own V	4-4x5	28.9	L	FP	Non	Lon	Zen	V	Bos	Bos	D. B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	38.8	A	Tim	Mat	Ros	Hoo	.....	4500

Ruggles 41	....	148	P 30x5	P 34x7	Her O	4-4x5	25.6	L	PC	Non	Per	Zen	G	Bos	Rem‡	D. B-L	B-L 31	U	3	Spi	Wis 660	R	F	7.00	37.4	A	Shu 5410	Det	Jac	Nor	Fir	4250
Sandow J8	....	144	S 36x4	S 36x7	Her OX	4-4x5	25.6	L	PC	Non	Chi	Zen	V	Eis	Bos	D. Ful	Ful GU14	U	....	Spi	She W-103	R	F	8.66	....	..	She 343	Own	Ros	....	....	4000
Schacht J	2600	158	S 34x4	S 34x7	Wis SU	4-4x5	27.3	L	PC	Non	Own	Str	V	Bos	Bos	D. Ful	Ful GU7	U	4	Blo	Wis 660D	R	F	7.00	33.6	A	Shu 510	She	Ros	....	Non	4900
Sterling DW10	....	142	S 36x4	S 36x6	Own V	4-4x5	28.9	L	FP	Non	Lon	Zen	V	Bos	Bos	D. B-L	B-L 35	U	3	Spi	Tim	W	½	7.25	38.8	A	Tim	Mat	Ros	Hoo	....	4500
Stewart 18	1990	160	S 34x4‡	S 34x6‡	Lyc C	4-4x5	25.6	L	FP	Non	Own	Zen	G	Rem	Rem	D. Ful	Ful LTU-4	U	3	Spi	Cla B-501	B	¾	6.28	25.1	B	Col	Det	Gem	Cla	Fir	3400
Stoughton D	....	140	S 36x4	S 36x7	Own	4-4½x5¼	....	H	FP	Sim	Own	Zen	G	Bos	....	B-L	B-L 35	U	4	The	She W103	W	½	8.66	46.3	A	She D343	Own	Ros	Bim	Gdy	4600
Traffic 4000C	1595	142	S 34x4‡	S 34x5‡	Con S4	4-4½x4¼	28.9	L	PC	Pie	Own	Zen	G	Bos	Bos	D. Ful	Ful GU-10	U	3	U-M	Cla B-501	B	¾	6.28	34.8	A	Own	Det	Own	Bim	Fir	3800
United 32	....	148	S 34x4	S 34x7	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Bos	....	D. B-L	B-L 31	U	3	Blo	Wis 40	R	½	6.00	34.5	A	Shu 510	Det	Lav	Van	....	3740
§*United 35*	....	148	P 34x5	S 34x7‡	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Bos	Non	D. B-L	B-L 31	U	3	Blo	Wis 51	R	½	7.75	30.7	A	Shu 310	Det	Lav	Van	Fir	3810
United 40	....	164	S 32x6	S 34x7	Wis Y6	4-3⅜x5	27.3	..	PC	Non	Per	Str	V	Bos	Bos	D. B-L	B-L 35	U	3	Blo	Wis 460	R	¾	6.00	32.1	A	Shu 5550	Det	Lav	Van	Fir	....
U. S. NW24	2275	144°	S 36x4‡	S 36x6‡	Bud WTU	4-3⅜x5⅛	22.5	L	PC	Non	Own	Str	V	Bos	Bos	D. Ful	Ful LTU5	U	3	Blo	She W-103	W	½	8.75	35.0	..	Shu 350	She	Lav	Sch	.....	4550
Victor 50	2345	142	S 34x4‡	S 34x7‡	Her OX	4-4x5	25.6	L	PC	Pie	Per	Zen	G	Eis	.....	D. Ful	Ful GU12	U	4	U-M	Wis 66	R	½	7.0	33.6	A	Shu 5410	Det	Lav	Smi	.....	4500
Wachusett K	....	154	....	....	Con K4	4-4½x5¼	27.2	L	FP	Non	G&O	Zen	V	Bos	Bos	D. B-L	B-L 35	U	4	Har	Tim 6460	W	F	7.75	41.5	..	Tim 1520	....	Ros	.....	Fir	4800
White 20	2950	168°	S 36x4‡	S 36x7‡	Own GK	4-3⅜x5⅛	22.5	L	SP	Non	Own	Zen	G	.....	.....	P. Own	Own 20	A	4	Spi	Own 20	R	½	7.53	32.45	A	Own 20	....	Own	.....	.....	4680
Wichita 40U	....	144	S 36x4	S 36x7	Wau BUX	4-3⅜x5	22.5	..	PS	....	....	Str	....	....	N-E	D. B-L	B-L	U	4	The	She	W	....	8.66	.....	A	She	Own	Ros	.....	.....	.....
Winther-Kenosha 34	2300	140	S 34x4‡	S 34x6‡	Wau V	4-4x5	25.6	L	PC	Non	Own	Str	V	Bos	Bos	D. Ful	Ful	U	3	Pet	Tim	S	F	6.43	25.7	A	Col	Mat	Ros	Van	Fir	3500
Winther-Kenosha 434	2850	132	S 34x5‡	S 34x5‡	Wau V	4-4x5	25.6	L	PC	Non	Own	Str	V	Bos	Bos	D. Ful	Ful	U	3	Pet	Own	I	D	9.00	36.1	B	Own	Mat	Ros	Own	Fir	4225
Witt-Will P	2785	168	S 36x3½	S 36x7	Con C4	4-4½x5¼	27.2	H	FP	Pie	Own	Zen	G	Eis	Non	D. B-L	B-L 35	U	4	Spi	Tin 6460	W	½	7.10	.....	...	Tim 1520	Del	Ros	Arc	Fir	4600
2¼ Ton																																			
Guilder E6	....	152	P 32x6	P 34x7	Con 6B	6-3¾x5	33.7	L	PC	Pie	G&O	Zen	G	Bos	Bos	D. B-L	B-L	U	4	M-E	Wis 660	R	F	7.75	.....	A	Shu 5410	Mer	Ros	Van	Non	.....
Larrabee XH	....	168	S 34x7	S 34x7	Con 6B	6-3¾x5	33.7	L	PC	Opt	Fed	Zen	G	Bos	Bos	D. B-L	B-L 31	U	3	Spi	She W-1501	W	½	6.50	26.7	A	She D 485	She	Ros	Smi	Fir	4450
2½ Ton																																			
§Ace 56B	3350	156°	S 36x5	S 36x10	Bud EBU	4-4¼x5½	28.9	L	PC	Pie	Own	Zen	V	Eis	Rem	D. B-L	B-L 50	A	4	U-M	Tim 6566	W	F	8.50	45.5	..	Tim 1544B	Mat	Ros	Day	Fir	5650
Acorn 50	3250	156	S 36x4‡	S 36x8‡	Bud ETU	4-4¼x5½	28.9	L	PC	McK	Chi	Zen	G	RBo	Non	D. B-L	B-L 51	A	4	Spi	Tim 6566	W	F	8.50	45.4	A	Tim 1542	Tut	Ros	Pru	.....	5500
Amer.-La France W	3950	Opt	S 36x5	DS36x6	Own 2R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos	Bos‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	7.57	40.6	B	Own 2R	Mer	.....	Day	.....	6600
§Armleder 50	....	152°	S 36x4	DS36x4‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	Han	Own	Zen	V	Bos	Bos‡	D. B-L	B-L	U	4	Spi	Tim	W	F	9.25	49.5	A	Tim	She	Ros	Smi	Fir	5300
Armleder 55	....	152	S 36x4	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Han	Own	Zen	V	Bos	Bos‡	D. B-L	B-L	U	4	Spi	Tim	W	F	9.25	49.5	A	Tim	She	Ros	Smi	Fir	5300
Atterbury 22C	....	156°	S 36x4‡	DS36x4	Con K4	4-4½x5¼	27.2	L	FP	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 51	A	4	Spi	Tim 6560	W	F	9.25	49.4	A	Tim 1544B	S.P	Gem	Arc	Fir	5670
Autocar H	....	114	S 34x6‡	S 36x10‡	Own H	4-4x5½	25.6	L	SP	Pha	Own	Str	G	Bos	L-N‡	P. Own	Own Y	A	4	Spi	Own H	R	F	7.72	46.3	A	Own H	Opt	Ros	Hoo	.....	5500
Autocar K	....	138	S 34x6‡	S 36x10‡	Own H	4-4x5½	25.6	L	SP	Pha	Own	Str	G	Bos	L-N‡	P. Own	Own Y	A	4	Spi	Own H	R	F	7.72	46.3	A	Own H	Opt	Ros	Hoo	.....	5600
Available L-2½	....	152	S 36x4‡	S 36x8‡	Her O	4-4x5	25.6	L	PC	Pie	Chi	Zen	G	Bos	Bos‡	D. B-L	B-L 35	A	4	Spi	Tim 6566	W	F	8.50	45.5	A	Tim 1544B	Tut	Ros	Bim	.....	5200
Bethlehem L	3195	145	S 36x4	S 36x8	Own H	4-4x5¼	25.6	L	PC	Pie	Bus	Zen	V	Bos	G&D	D. Ful	Ful GU15	U	4	Spi	Wis 88E	R	½	8.80	42.2	A	She D343	Mat	Lav	Smi	.....	5200
Biederman	....	160°	S 36x5	S 36x10	Con 6M	6-3⅜x4½	27.3	L	PC	Han	Own	Zen	G	Del	Del	D. B-L	B-L 51	U	4	Spi	Tim	W	F	8.5	45.0	A	Shu	Mat	Ros	Bet	Non	4900
Chicago 25	....	168°	S 36x4	S 36x8	Her OX	4-4x5	25.6	L	PC	Pie	Chi	Zen	G	Apo	Non	D. B-L	B-L 35	U	4	Pet	Tim 7566	R	F	8.00	42.8	A	Tim 1544B	Mat	Gem	StM	.....	5250
Commerce 25A	....	144	S 36x5	S 36x10	Con K4	4-4½x5¼	27.2	L	FP	Non	Lon	Zen	V	Bos	Bos	D. B-L	B-L 51	A	4	U-M	Tim 6566	W	F	7.75	41.4	A	Tim 1526	Bea	Ros	.....	Fir	5200
Commerce 25B	....	156	S 36x5	S 36x10	Con K4	4-4½x5¼	27.2	L	FP	Non	Lon	Zen	V	Bos	Bos	D. B-L	B-L 51	A	4	.....	Tim 6566	W	F	7.75	41.4	A	Tim 1526	Bea	Ros	.....	Fir	5300
§Commerce 25C	....	176	S 36x5	S 36x10	Con K4	4-4½x5¼	27.2	L	FP	Non	Lon	Zen	V	Bos	Bos	D. B-L	B-L 51	A	4	U-M	Tim 6566	W	F	7.75	41.4	A	Tim 1526	Bea	Ros	.....	Fir	5400
Concord J	3600	150	S 36x6	S 36x10	Bud EBU	4-4¼x5½	28.9	L	PC	Pie	Own	Zen	V	Eis	Opt‡	D. B-L	B-L 51	U	4	Spi	Tim 6566	W	F	9.25	49.4	A	Tim 1544	.....	Ros	Arc	Fir	5400
Corbitt B	....	152	S 36x4‡	S 36x8‡	Con K4	4-4½x5¼	27.2	L	FP	Sim	MeC	Str	V	Eis	Bos‡	D. B-L	B-L 51	U	4	Spi	She W-21	W	½	10.3	55.1	A	She 3FA10	She	Ros	Bim	Fir	5325
Day-Elder I	....	144°	S 36x4‡	S 36x7‡	Bud KBU	4-4x5¼	25.6	L	PC	Mon	Bus	Zen	V	Eis	.....	D. B-L	B-L 35	U	4	Spi	Tim 6566	W	F	9.25	49.5	A	Tim 1526	I.C.	Gem	Van	Fir	5700
Denby 43	....	155	S 36x4	S 36x8	Her O	4-4x5	25.6	L	PC	....	Lon	Zen	G	Eis	.....	D. Ful	Ful	U	4	U-P	Cla	I	D	9.00	39.12	..	Con	Det	Ros	Smi	.....	4925
Diamond T-U4	....	163	S 36x4	S 36x8	Her K	4-4¼x5¾	28.9	L	FP	Mer	G&O	Str	G	Bos	.....	D. Cov	Cov RAD4	A	4	Spi	Tim 6566	W	F	8.5	44.2	A	Tim 1544B	Mat	Ros	StM	.....	6100
Dixon C	3500	154	S 36x4	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Pie	G&O	Zen	G	Bos	Non	D. Ful	Ful GU-14	U	4	Spi	Tim 6566	W	F	Opt	Opt	A	Tim 5500	S.P	Ros	Smi	Non	5900
Dorris K5	3785	Opt	S 36x5‡	S 36x8	Own	4-4¼x5½	28.9	H	PS	Own	McC	Str	G	Bos	Bos	D. Own	B-L 55	A	4	Spi	Tim 6566	W	F	7.75	38.6	A	Tim 1544B	Mat	Ros	Day	Fir	5650
Eagle 105	....	130°	S 34x5‡	S 34x8‡	Bud KTU	4-4x5¼	25.6	L	PC	....	Own	Zen	G	Eis	.....	D. Cov	Cov JUC	U	3	M-E	Own 105	R	F	8.8	31.8	A	Col 7000	Mat	Ros	Std	Fir	5000
Federal U4	3200	157	S 36x4‡	DS36x4‡	Con K4	4-4½x5¼	27.2	L	FP	Mon	Own	Zen	V	Eis	Rem	P. B&B	D-G	A	4	Spi	Tim 6560	W	F	7.45	45.6	A	Own	Mat	Gem	Smi	Fir	5300
Garford 50	3750	156	S 36x4	S 36x8	Bud EBU-I	4-4¼x5½	28.9	L	PC	Sim	Own	Zen	G	Spl	A-L	D. Own	B-L 55	A	7	Spi	Tim 65660D	W	F	8.5	41.2	A	Tim 1532B	Per	Ros	Day	.....	5950
§Gary E25	3250	148	S 36x4	S 36x10	Bud EBU-I	4-4¼x5½	28.9	L	PC	MeC	Chi	Str	V	Eis	.....	D. Ful	Ful	U	4	Blo	Tim 6566	W	F	8.50	41 0	A	Tim 1544	Mar	Ros	StM	Gdy	5500
G.M.C. K-52A	....	146	S 36x4‡	S 36x10‡	Own	4-4x5½	25.6	L	FP	MeC	Own	Mar	G	Eis	Rem	D. Own	Own	U	7	Own	Tim 6560	W	F	8.50	66.6	...	Tim 1542B	Det	Own	Day	.....	5780
G.M.C. K-52B	....	158	S 36x4‡	S 36x10‡	Own	4-4x5½	25.6	L	FP	MeC	Own	Mar	G	Eis	Rem	D. Own	Own	U	7	Own	Tim 6560	W	F	8.50	66.6	...	Tim 1542B	Det	Own	Day	.....	5820
G.M.C. K-52C	....	193	S 32x4‡	S 36x10‡	Own	4-4x5½	25.6	L	FP	MeC	Own	Mar	G	Eis	Rem	D. Own	Own	U	7	Own	Tim 6560	W	F	8.50	66.6	...	Tim 1542B	Det	Own	Day	.....	5845
Gotfredson 51	....	146⅞°	S 36x5	S 36x10	Bud KBU	4-4x5¼	25.6	L	PC	Non	MeC	Zen	V	RBo	Rem	P. B&B	B-L 35	U	4	Spi	Tim 65660D	W	F	7.75	41.5	A	Tim 1460	Det	Gem	Day	.....	5300
Gotfredson 56	....	156⅞°	S 36x5‡	S 36x10‡	Bud BUS	6-4x5½	38.4	L	PC	Non	MeC	Zen	V	RBo	Rem	P. B&B	B-L 35	U	4	Spi	Tim 65660D	W	F	7.75	41.5	A	Tim 1460	Det	Gem	Day	.....	5500
Gramm-Bernstein 125	....	144°	S 36x4‡	DS36x4	Con S4	4-4¼x4½	28.9	L	FP	Non	Own	Str	G	N-E	N-E	D. Ful	Ful GU7	U	4	Own	She W-103	W	½	8.66	41.57	...	She D485	Per	Ros	.....	.....	5440
Gramm-Kincaid 543N	....	150°	S 36x4‡	S 36x7‡	Lyc C4	4-4x5	25.6	L	FP	Non	Own	Zen	G	A-L	A-L	D Mun	Mun T23	U	3	Thei	Wis 61B	R	½	7.75	31.0	B	Col 5300	Mat	Ros	Smi	Non	4200
Gramm-Kincaid 563N	....	150°	S 36x4‡	S 36x7‡	Con 8R	6-3⅜x4½	28.9	L	FP	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Thei	Wis 61B	R	½	7.75	31.0	B	Col 5300	Mat	Ros	Smi	Non	4300
Grass Premier 80	3350	167	S 36x4‡	S 36x8	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Chi	Str	V	Bos	Bos	D. B-L	B-L 55	A	7	Spi	Tim 6566	W	½	8.25	46.0	B	Con	Det	Ros	Bim	Fir	5400
Grass Premier 55	2600	150	P 32x6	P 36x8	Lyc C	4-4x5	25.6	L	PC	....	Chi	Str	V	Bos	Bos	D. B-L	B-L 35	U	4	Spi	Cla 720	S	½	7.00	38.0	B	Con	Det	Ros	Van	Fir	4400
Hahn K Spec	....	144°	S 36x4	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Pha	Chi	Str	G	Bos	Del	D. B-L	B-L	U	4	Spi	Tim 6560	W	F	8.5	.....	A	Tim 1526	Mer	Ros	Opt	Opt	4900
Harvey WFC	....	150°	S 36x5‡	S 36x10‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	MeC	Own	Str	G	Eis	Non	D. B-L	B-L 55	A	7	Spi	Tim 65660D	W	F	9.25	87.9	A	Tim 1544B	Bea	Ros	Smi	Non	6800
Hug H4K	....	121	P 36x6	DP36x6	Bud KTU	4-4x5¼	25.6	L	PC	Han	Per	Zen	V	Spl	Non	D. Ful	Ful	U	4	Blo	Wis	R	½	7.75	37.2	A	Wis	Tut	Ros	Smi	Fir	5065
Indiana 25	....	160	S 36x4	S 36x8	Her L	4-4½x5¾	32.4	L	PC	Pie	MeC	Str	G	Eis	Rem†	P. B&B	B-L 51	A	4	Sne	She W-21	W	½	8.75	50.8	A	She D-370	Bea	Who	.....	.....	6300
Kearns CL	....	158	S 36x4	DS36x8‡	Her L	4-4½x5¾	32.4	..	SP	....	....	Own	Zen	....	.....	D. Ful	Ful	U	4	.....	She	I	½	.....	.....	A	She	....	Ros	.....	.....	5400
Kelly-Springfield KS25	3200	153	S 36x4‡	S 36x8‡	Con K4	4-4⅛x5¼	27.2	L	FP	Pie	Own	Zen	G	Eis	Del	P. B&B	B-L 55 Max	A	7	Pet	Own	W	½	7.75	73.6	A	Own	Mat	Ros	Smi	.....	6000
King Zeitler 45	....	156°	S 36x5‡	S 36x8‡	Con S4	4-4¼x4½	28.9	L	FP	Mon	Chi	Str	G	Eis	Wes Bos‡	D. B-L	B-L 35	U	4	Pic	Tim 6566	W	F	9.25	49.5	A	Tim 1544B	Mar	Ros	StM	Fir	5400
Kissel	....	168	S 36x4	S 36x8‡	Own 50000	4-4¼x5½	28.9	L	SP	Pie	MeC	Str	V	Eis	Rem‡	D. W-G	Ful G7	A	4	Spi	Tim 6566	W	F	8.50	40.8	...	Tim 1544B	Mat	Ros	Pru	Std	5100
Kleiber	3850	163	S 36x5‡	DS36x5‡	Con L4	4-4½x5½	32.4	L	FP	Non	R-T	Str	V	RBo	Bos‡	D. B-L	B-L 51	A	4	Spi	Tim 65660D	W	F	7.75	41.5	A	Tim 1544B	Bet	Ros	Smi	.....	6500
Lange E	3650	149½°	S 36x4‡	S 36x8‡	Con K4	4-4½x5¼	27.2	L	FP	Non	Own	Str	V	Apo	Non	D. B-L	B-L 51	A	4	Pet	Tim 65660D	W	F	9.25	49.5	A	Tim 1544B	S.P	Ros	Hoo	Opt	5950
Larrabee K-5	....	176°	S 36x4‡	S 36x8‡	Con L4	4-4½x5½	32.4	L	FP	Pha	R-T	Zen	G	Bos	Non	D. B-L	B-L 51	A	4	Spi	She W-22	W	½	7.75	47.0	A	She D-370	She	Ros	Smi	.....	5700
LeMoon GP3	....	Opt	S 36x4	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Pha	Chi	Str	G	Bos	Bos‡	D. B-L	B-L 51	U	4	Own	Tim 6566	W	F	7.75	.....	A	Tim 1542	Tut	Ros	StM	.....	4100
Mack AB	....	146½°	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	*8.98	43.5*	B	Own AB	Mer	Own	.....	.....	.....
Mack AB	....	146½°	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	R	F	*9.25	44.9*	B	Own AB	Mer	Own	.....	.....	.....
Master 41	....	154°	S 36x4	S 36x10	Bud EBU-I	4-4¼x5½	28.9	..	FP	....	.....	Str	....	Spl	.....	D. Ful	Ful G	A	4	Spi	Tim 65660D	W	.....	.....	.....	A	Tim 1544	....	Ros	.....	.....	6400
Menominee D	....	144	S 36x4‡	S 36x8‡	Wis TAU	4-4x6	25.6	L	PC	Mon	Own	Str	G	Eis	Bos‡	D. Det	Cot AU	U	4	Spi	Wis 8001	W	½	8.60	45.0	A	Shu	Tut	Ros	Std	Fir	4870
Moreland EXX4	3650	162	S 36x4	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Non	Own	Str	V	Spl	A-L	. Own	B-L 51	A	4	Pet	Tim	.	F	7.25	38.8	...	Tim	U.S.	Ros	Smi	Fir	5450
Moreland EXX6	3650	162	S 36x4	S 36x8	Con 6M	6-3⅜x4½	27.3	L	FP	Non	Own	Str	V	A-L	A-L	. Own	B-L 51	A	4	Pet	Tim	..	F	7.25	38.8	...	Tim	U.S.	Ros	Smi	Fir	5500
National 23	3725	178	P 36x6	DS36x6‡	Wau V	4-4x5	25.6	L	PC	Non	McK	Zen	G	Bos	Bos	D. B-L	B-L 35	U	4	Spi	Tim 6566	W	F	8.5	45.5	A	Tim 1520	Mat	Ros	Van	Fir	5000
Netco B	3500	169°	S 36x5‡	S 36x10‡	Her L	4-4½x5¾	32.4	L	PC	Opt	Bus	Zen	V	Bos	Bos	D. B-L	B-L 51	A	4	Pet	Tim 65660D	W	F	8.5	45.4	A	Tim 1544B	Mat	Ros	Smi	.....	6000
Noble D-51	3350	162°	S 36x5	S 36x10	Bud ETU	4-4¼x5½	27.2	L	PC	Pie	Chi	Str	V	Spl	Bos‡	D. Ful	Ful G-7	A	4	Blo	She W21	W	½	8.75	42.0	A	She D 370	Tut	Lav	Bim	Fir	5750
Ogden E2	....	160	S 36x4	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Pha	Chi	Zen	G	Eis	Rem	D. B-L	B-L 51	U	3	Pic	Tim	W	F	7.75	26.0	A	Tim	Tut	Ros	Smi	Non	5600
O K	3250	150	S 36x4	S 36x8	Bud EBU-I	4-4½x5½	28.9	L	PC	Pie	R-T	Zen	V	Eis	.....	D. Ful	Ful GU7	U	4	Har	Tim 6566	W	F	9.25	.....	...	Shu 550	Tut	Ros	Bim	Gdy	5350
O. K. Oil Spec	3850	164	S 36x5	S 36x10	Bud YBU-I	4-4½x6	32.4	L	PC	Non	Own	Zen	V	Eis	Wis	D. Ful	Ful	A	4	Har	Tim 6566	W	F	9.25	57.3	A	Shu 610	Tut	Ros	Bim	Gdy	6550
Oshkosh BO	3875	146	P 40x8	P 40x8	Her OX	4-4x5	25.6	L	FP	Dup	Own	Str	V	A-L	A-L	D. B-L	B-L 51	U	4	Pet	Own BO	B	F	8.00	43.0	B	Own BO	Tut	Ros	Roy	Fir	5400
Oshkosh BBO	3975	165	P 40x8	P 40x8	Her OX	4-4x5	25.6	L	FP	Dup	Own	Str	V	A-L	A-L	D. B-L	B-L 51	U	4	Pet	Own BBO	B	F	8.00	43.0	B	Own BBO	Tut	Ros	Roy	Fir	5800
Oshkosh M	2875	146	S 36x6‡	S 36x8‡	Her OX	4-4x5	25.6	L	FP	Pie	Own	Zen	V	Spl	.....	D. B-L	B-L 51	U	4	Blo	Wis F65B	R	F	9.25	49.5	A	Wis 20	Tut	Han	VanG	dy	5275
Oshkosh MM	2975	170	S 36x6‡	S 36x8‡	Her OX	4-4x5	25 6	L	FP	Pie	Own	Zen	V	Spl	.....	D. B-L	B-L 51	U	4	Blo	Wis F65B	R	F	9.25	49.5	A	Wis 20	Tut	Han	Van	Gdy	5350

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Trade Name and Model	General: Chassis Price	General: Standard Wheelbase (inches)	General: Tire Size: Front (inches)	General: Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Engine: Fuel System: Carburetor (Make)	Engine: Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Springs (Make)	Steering Gear (Make)	Wheels (Make)	Rims (Make)	Chassis Weight (lbs.) (stripped)
2½ Ton—Cont'd																																
Patriot 50	...	156	S 36x5	S 36x10‡	Hin 400	4-4x5¼	25.6	L	PP	Non	Own	Zen	V	Bos	.....	D. B-L	B-L 51	A	4	The	Tim 6566	W	F	9.25	49.5	A	Shu	Mar	Ros	Bim	Fir	5300
Rainier R28	....	157°	S 34x4	S 34x8	Con K4	4-4½x5¼	27.2	L	FP	Pie	Bus	Zen	V	RBo	Del	D. B-L	B-L 35	A	4	Spi	She W103	W	½	7.75	41.4	A	She D390	She	Ros	Van	.....	4900
Sandow	....	165	S 36x4	S 36x8	Bud ETU	4-4¼x5½	28.9	L	PC	Mon	Chi	Str	G	Bos	Non	D. B-L	B-L 35	A	4	Spi	Tim 6566	W	F	9.25	37.0	....	Tim 1540B	....	Ros	.....	.....	4600
Sanford W6 20	....	185	S 34x7	S 34x7	Con 6B	6-3¾x5	33.7	L	PC	Non	R-T	Str	G	Con	Dyn	D. Ful	Ful	A	4	Spi	She	W	½	7.8	23.6	A	She	She	Ros	Van	Gdy	4600
Sanford W4-25A	....	156	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	FP	Non	R-T	Str	G	Con	Dyn	D. Ful	Ful	A	4	Spi	She 21	W	½	8.75	42.0	A	She D370	She	Ros	Van	.....	6100
§Sanford W-4-25B	....	174	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	FP	Non	R-T	Str	G	Con	Dyn	D. Ful	Ful	A	4	Spi	She 21	W	½	8.75	42.0	A	She D370	She	Ros	Van	.....	6250
Schacht L	3600	156	S 36x4‡	S 36x8‡	Wis RCU	4-4½x6	32.4	L	PC	Pie	Own	Zen	G	Bos	Non	D. B-L	Own	A	4	Spi	Wis	R	F	8.5	40.4	B	Own	She	Own	Day	.....	6400
Selden 44	....	157	S 36x4	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Pha	Lon	Str	G	Bos	Bos	D. B-L	B-L	U	4	Blo	Cla	B	½	8.00	42.8	A	Tim	Det	Ros	Smi	.....	4740
Selden Unit 50	....	149°	S 36x4‡	DS36x8	Con K4	4-4½x5¼	27.2	L	FP	Pha	Lon	Str	G	Eis	Bos	D. B-L	B-L 51	A	4	Spi	Tim 6566	W	..	8.50	45.4	A	Tim 1544B	Det	Ge.n	Std	.....	5980
Service 61	....	164	S 36x4	S 36x10	Bud EBU-1	4-4¼x5½	28.9	L	PC	Non	Own	Str	V	Eis	Rem	P. B&B	B-L 51	A	4	Spi	Tim 6566	W	F	7.75	41.5	A	Tim 1544B	She	Ros	Int	.....	6126
Standard 2½-3½K	....	147°	S 36x4‡	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Sim	Lon	Str	G	Eis	Bos‡	B. B-L	B-L 35	A	4	Spi	Tim 6566	W	F	8.50	45.4	A	Tim 1542B	Amc	Gem	Day	.....	5400
Standard 2½-3½KS	....	147°	S 36x4‡	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Sim	Lon	Str	G	Eis	Bos‡	D. B-L	B-L 55	A	4	Spi	Tim 6566	W	F	9.25	49.4	A	Tim 1542B	Amc	Gem	Day	.....	5488
Sterling DW-12	....	142	S 36x4	S 36x7	Own V	4-4x5	25.6	L	PC	Wau	Own	Zen	V	Eis	.....	D. B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	38.8	....	Tim	Mat	Ros	Hoo	.....	5100
Stewart 19	3200	165	S 36x4	S 36x8	Lyc	6-3½x5	31.5	L	PS	Non	G&O	Zen	V	Rem	Rem	D. Ful	Ful	U	4	Spi	Tim	W	F	7.25	43.2	A	Sal	Own	Gem	Cla	Fir	4600
Super Truck 50	3150	156	S 36x4‡	S 36x8‡	Wis TAU	4-4x6	25.6	L	PC	Sim	Chi	Zen	G	Bos	Ves†	D. Ful	Ful G	U	4	Spi	She W21	W	½	8.75	42.0	A	She D-370	She	Ros	Pru	.....	5200
Traffic	2700	140	S 36x4	S 36x8	Con S4	4-4¼x4½	28.9	L	PC	Pie	Own	Zen	G	Bos	Bos	D. Ful	Ful	U & A	8	U-M	Tim	W	F	8.25	.....	A	Tor	Det	Ros	Bim	.....	5600
Twin City BW	2975	163½	S 36x5‡	S 36x10‡	Own TW	4-4¼x6	28.9	H	PC	Own	Mod	Str	V	Bos	N-E‡	P. B&B	Ful G7	A	4	Spi	Cla 2D	I	D	8.00	38.4	....	Shu 550	Mat	Ros	Bim	Fir	5625
Union FLW&FW	....	155	S 36x5	S 36x10	Wis TAU	4-4x6	25.6	L	PC	Dup	G&O	Zen	G	Eis	L-N	D. Ful	Ful GU-14	U	4	U-P	Wal 25A	R	F	.....	37.7	....	She D370	Mat	Jac	Pru	Gdy	5900
Union F	....	155	S 36x5	S 36x10	Wis TAU	4-4x6	25.6	L	PC	Dup	G&O	Zen	G	Eis	L-N	D. Ful	Ful GU-14	U	4	U-P	Wis 88EF	W	.....	.....	.....	....	She D370	Mat	Jac	Smi	Gdy	5900
United 50	....	156	P 34x4	DS34x8	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Bos	.....	D. B-L	B-L 35	U	4	Blo	Wis 66	R	½	7.75	41.5	A	Shu 510	Det	Lav	Van	.....	4120
U. S. R.	2975	156°	S 36x4‡	DS36x4	Hin 400	4-4x5¼	25.6	L	PC	Pie	Own	Str	V	Spl	Bos‡	D. B-L	B-L 51	A	4	Blo	She W-21	W	½	8.70	46.5	A	Shu 510	She	Lav	Sch	.....	5500
Victor 70	2925	156	S 36x4‡	S 36x8‡	Her OX	4-4x5	25.6	L	PC	Pie	Per	Zen	G	Eis	.....	D. Ful	Ful GU12	U & A	8	U-M	Wis 88EF	R	F	8.66	200.0	A	Shu 5550	Det	Lav	Smi	.....	5800
Victor 60	2675	156	S 36x4‡	S 36x8‡	Her OX	4-4x5	25.6	L	PC	Pie	Per	Zen	G	Eis	.....	D. Ful	Ful GU12	U	4	U-M	Wis 88EF	R	F	8.66	41.6	A	Shu 5550	Det	Lav	Smi	.....	5400
Wachusett L	....	170	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Non	G&O	Zen	V	Bos	Bos	D. B-L	B-L 55	U	4	Har	Tim 6560	W	F	7.75	41.5	....	Tim 1542	Sav	Ros	Smi	Fir	5200
Ward La France 2B	....	170	S 36x4	DS36x4	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Str	G	Bos	A-L	D. B-L	B-L 51	A	4	Spi	Tim	W	F	7.25	38.8	A	Tim	Row	Ros	Hoo	.....	5900
White 51	3750	170	S 36x5‡	S 36x8‡	Own GRB	4-4¼x5¾	28.9	L	PC	Own	Own	Zen	V	.....	L-N‡	P. Own	Own	U	4	Spi	Own	R	½	7.53	37.75	B	Own	.....	Own	.....	.....	5700
Wilcox CC	3000	135	S 36x4	S 36x3½	Own CC	4-4¼x5	28.9	L	PC	Dup	G&O	Str	G	Ros	Wes‡	D. Own	Own Q	A	4	Own	Wal 25A	R	½	8.60	42.3	B	Shu 550	She	Own	Cla	....	5000
Winther-Kenosha 44	3100	161	S 34x5‡	S 34x7‡	Wis	4-4½x5	27.2	H	FP	Non	Own	Str	V	Bos	Bos	D. Ful	Ful	U	4	Pet	Cla	I	D	7.00	39.0	A	Col	Mat	Ros	Van	Fir	4375
Witt-Will S	3100	146	S 36x4‡	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Pie	Own	Zen	V	Eis	Bos	D. B-L	B-L 51	U	4	Spi	Tim 6560	W	F	8.25	40.0	A	Tim 1544	She	Ros	Arc	Non	5000
3 Ton																																
§Acme 60L	....	156	S 36x4‡	S 36x10‡	Con L4	4-4½x5½	32.4	L	FP	Mon	G&O	Zen	V	Bos	Bos	P. B&B	Cot R	A	4	Blo	Tim 656600D	W	F	8.50	42.0	A	Tim 1544B	Det	Ros	Int	....	5050
Armleder 60	....	152	S 36x5	S 36x10	Bud EBU-1	4-4¼x5½	28.9	L	PC	Han	Own	Zen	V	Bos	Bos‡	D. B-L	B-L	A	4	Spi	Tim	W	F	10.5	56.2	A	Tim	She	Ros	Smi	Fir	5800
Autocar H	....	114	S 34x6	S 36x10	Own H	4-4x5½	25.6	L	SP	Pha	Own	Str	G	Bos	L-N*	P. Own	Own Y	A	4	Spi	Own H	R	F	7.72	46.3	A	Own H	Opt	Ros	Hoo	Hoo	5500
Autocar K	....	138	S 34x6	S 36x10	Own H	4-4x5½	25.6	L	SP	Pha	Own	Str	G	Bos	L-N*	P. Own	Own Y	A	4	Spi	Own H	R	F	7.72	46.3	A	Own H	Opt	Ros	Hoo	.....	5600
Autocar HPDS	....	114	S 34x6‡	S 36x12‡	Own Y	4-4¼x6½	28.9	L	SP	Pha	Own	Str	G	Bos	L-N*	P. Own	Own Y	A	4	Spi	Own M	R	F	8.72	63.6	A	Own J	Del	Ros	Hoo	.....	6000
Brockway K	....	153	S 36x4	S 36x8‡	Con K4	4-4½x5¼	27.2	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 35	A	4	Spi	Tim 6566	W	F	7.75	.....	A	Tim 1542	She	Ros	Day	Non	5260
Brockway K16	....	154⅜	S 36x4	S 36x8‡	Con K4	4-4½x5¼	27.2	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 55	A	7	Spi	Tim 6566	W	F	7.75	.....	A	Tim 1542	She	Ros	Day	Non	5260
Brockway KR	....	156	S 36x4	S 36x8‡	Con L4	4-4½x5½	32.4	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 55	A	4	Spi	Tim 6566	W	F	7.75	.....	A	Tim 1542	She	Ros	Day	Non	5760
Brockway KHB	....	163	S 36x4	P 36x8	Wis HB	6-3⅜x5	33.7	H	FP	Non	Bus	Zen	V	Eis	L-N	D. B-L	B-L 55	A	7	Spi	Tim 6566	W	F	7.75	.....	A	Tim 1542	She	Ros	Day	Non	2605
Buck 64	....	163°	S 36x5‡	S 36x10‡	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 55	A	7	Spi	Tim 6566	W	F	9.25	87.8	A	Tim 1544	Mat	Ros	Smi	Fir	6100
Buck 66	....	163°	S 36x5‡	S 36x10‡	Con 6B	6-3⅜x5	33.8	L	PC	Non	Own	Zen	V	Bos	Bos	D. B-L	B-L 55	A	7	Spi	Tim 6566	W	F	9.25	87.8	A	Tim 1644B	Mat	Ros	Smi	Fir	6100
§Clinton 65	....	184	S 34x5‡	DS34x5‡	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	G	Bos	Bos*	D. B-L	B-L 55	A	4	Blo	Tim 6566	W	F	8.50	45.5	A	Tim 1544B	Per	Ros	StM	.....	5925
Concord JL	3600	170	P 36x6	S 36x10	Bud EBU	4-4¼x5½	28.9	L	PC	Pie	Own	Zen	V	Eis	Opt	D. B-L	B-L 51	U	4	Spi	Tim 6566	W	F	9.25	49.4	A	Tim 1544B	.....	Ros	Arc	Fir	5500
Corbitt R	....	160	S 36x4‡	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Sim	MeC	Str	V	Eis	Bos‡	D. B-L	B-L 51	U	4	Spi	She W-21	W	½	10.3	55.1	A	She 3FA10	She	Ros	Smi	....	6160
Day-Elder J	....	156	S 36x4‡	S 36x8‡	Bud EBU	4-4¼x5½	28.9	L	PC	Mon	Bus	Zen	V	Eis	Bos‡	D. B-L	B-L 51	U	4	Spi	Tim 6566	W	F	9.25	49.5	A	Tim 1544	I.C.	Gem	Van	Fir	6500
Defiance H2	....	160	S 36x4	S 36x8	Con K4	4-4½x5¼	27.2	L	PC	Mon	Chi	Zen	V	Bos	Bos	D. Ful	Ful GU12	U	4	Spi	Wis 88E	R	½	9.50	45.6	A	Tim	Det	Lav	StM	.....	5140
Defiance HL2	....	175	S 36x4	S 36x8	Con K4	4-4½x5¼	27.2	L	PC	Mon	Chi	Zen	V	Bos	Bos	D. Ful	Ful GU12	U	4	Spi	Wis 88E	R	½	9.50	45.6	A	Tim	Det	Lav	StM	.....	5340
Defiance H3	....	135	S 36x5	S 36x10	Con K4	4-4½x5¼	27.2	L	PC	Mon	Chi	Zen	V	Bos	Bos	D. Ful	Ful GU12	U	4	Spi	Wis 120FG	R	½	9.50	45.6	A	Tim	Det	Lav	Smi	.....	5200
Denby 35	....	155	S 36x4	S 36x8	Con K4	4-4⅜x5¼	27.2	L	PC	.....	Lon	Zen	G	Eis	.....	D. Ful	Ful	A	4	U-P	Cla	I	D	8.15	45.3	....	Con	Det	Ros	Smi	.....	5090
Dixon	3700	158	S 36x5	S 36x10	Her	4-4⅜x5¾	36.1	L	FP	Pie	G&O	Zen	V	Bos	Bos	D. Ful	Ful GU14	U	4	Spi	Tim	U	F	9.25	.....	....	Shu 610	.....	Ros	Day	.....	6300
Double Drive TT	4000	144	S 36x6‡	S 36x6‡	Bud ETU	4-4¼x5½	28.9	L	PC	Pie	Lon	Zen	V	Spl	Opt	D. Det	Own D. T. P	A	4	Own	Own D.T.P.	W	½	8.50	39.5	B	Own FTT	Tut	Ros	Std	.....	6250
Duplex AC	....	165	S 34x5‡	DS36x8‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	Opt	Mod	Zen	V	Eis	Opt	D. B-L	B-L 50	U	4	Pet	She W21	W	F	7.75	45.4	A	She 370	Pen	Ros	Mot	Fir	5500
Fageol 340	4200	172	S 36x5	DS36x5	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	V	Bos	Bos	D. B-L	B-L 51	U	4	Spi	Tim 6570	W	F	7.75	41.4	A	Tim 1544B	Mat	Ros	Van	.....	7000
Fageol 360	4750	172	P 36x6	DP36x6	HaS	4-4¾x5½	28.9	H	PC	H-S	Lon	Zen	V	Del	Del	D. B-L	Own B	A	7	Spi	Tim 6570	W	F	5.60	59.5	A	Tim 1544B	Mat	Ros	Bud	.....	6500
Federal 1B6	....	190	P 32x6	DP32x6	Con 6B	6-3¾x5	33.7	L	PC	Non	Mod	Zen	V	Eis	Rem	P. B&B	Det R400	A	4	Spi	Tim 6566	W	F	6.75	.....	A	Own	Mat	Gem	Smi	Fir	5400
F. W. D. B	4200	124	S 36x6‡	S 36x6‡	Wis A	4-4⅜x5½	36.1	T	PC	Pie	MeC	Str	G	Eis	N-E‡	O. H-S	Cot DAF	A	3	Own	Own B	B	F	8.90	35.6	B	Own B	Tut	Ros	Sch	.....	6300
Gary Oil Field	3750	150	P 36x6	P 40x8	Bud YBU-I	4-4½x6	32.4	L	PC	MeC	Chi	Str	V	Eis	.....	D. B-L	B-L	A	4	Spi	Tim	W	F	8.50	41.0	A	Tim	Mer	Ros	Day	.....	5680
Gary Oil Field	4250	160	P 36x6	P 40x8	Bud Bus	6-4x5½	38.4	L	PC	MeC	Chi	Str	V	Eis	.....	D. Ful	Ful	A	4	Blo	Tim 6566	W	F	8.50	41.0	A	Tim	Mer	Ros	Day	.....	5850
Gotfredson 60	....	152½	S 36x5‡	S 36x12‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	Sim	MeC	Zen	V	RBo	Rem	D. B-L	B-L 51	A	4	Spi	Tim 6570SP	W	F	9.25	49.4	B	Tim 1526	Det	Ros	Day	Non	6200
Gotfredson 66	....	166⅜	S 36x5‡	S 36x12‡	Bud BUS	6-4x5⅛	38.4	L	PC	Sim	MeC	Zen	V	RBo	Rem	D. B-L	B-L 51	A	7	Spi	Tim 6570SP	W	F	9.25	49.4	B	Tim 1526	Det	Ros	Day	....	6800
Gramm-Bernstein 30	....	150	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful G7	A	8	Own	She W-21	W	½	7.75	63.7	B	She D-370	Per	Ros	Smi	Fir	6560
Gramm-Kincaid 648O	....	152°	S 36x5‡	S 36x8‡	Her L	4-4½x5½	32.4	L	FP	Pie	Own	Zen	G	Bos	A-L	D. Ful	Ful H	A	8	Thei	Wis 88EF	R	½	5.50	100.5	B	Wis 30	Mat	Ros	Smi	Non	6560
Guilder H	....	152	S 36x5	DS36x5‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	Pie	G&O	Zen	G	Eis	Bos	D. B-L	B-L 51	A	4	M-E	Wis 88EF	W	F	7.75	42.0	....	Shu 5550	Mer	Ros	Van	Non	5600
Hahn L	3600	146°	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Pha	Chi	Str	G	Bos	Del	D. B-L	B-L	U	4	Spi	Tim 6570D	W	F	8.5	.....	A	Tim 1544	Mer	Ros	Opt	Opt	5900
Indiana 26	....	162	S 36x4	S 36x8	Her L	4-4½x5¾	32.4	L	PC	Pie	MeC	Str	V	Eis	Rem†	P. B&B	B-L 55	A	7	Sne	She W-21	W	½	8.75	83.0	A	She D-370	Bea	Who	.....	.....	6500
Int. Harvester 63	....	140	S 36x5‡	S 36x8‡	Own 63	4-4¾x5	28.9	H	SP	Own	Own	Own	G	RBo	Rem‡	D. Own	Own 63	A	4	Own	Own 63	I	D	9.00	53.1	B	Own 63	.....	Own	Own	.....	5660
Kenworth K-S	3750	160	S 36x5	S 36x8	Bud EBU	4-4¼x5½	28.9	L	PC	Non	Own	Zen	V	RBo	Rem	D. B-L	B-L 51	U	4	Spi	She W-21	W	½	7.75	46.8	A	She D-370	Lah	Ros	Smi	.....	6300
King Zeitler 60	....	156°	S 36x5‡	S 36x8	Con K4	4-4½x5¼	27.2	L	FP	Pha	Chi	Str	G	Eis	Bos‡	D. B-L	B-L 51	A	4	Pic	Tim 6570	W	F	9.25	49.5	A	Tim 1544B	Mar	Ros	StM	.....	5400
Kleiber Spec	4100	163	S 36x5	DS36x5‡	Con L4	4-4½x5½	32.4	L	FP	Non	R-T	Str	V	RBo	Bos	D. B-L	B-L 60	.....	4	.....	Tim 6570 D	.....	.....	.....	.....	.....	Tim 1544 B	Bet	Ros	Smi	.....	.....

Lange	....	156	S 36x4	S 36x10	Con 6B	6-3¾x5	33.8	L	FP	Non	Own	Str	V	Apo	Non	D. B-L	B-L 55	U	4	Pet	Tim 6570 D	W	F	9.25	49.5	A	Tim 1544B	SP	Ros	Hoo	Opt	6450
Maccar 64	....	166	S 36x5	S 36x10	Wis UAU	4-4¼x6	28.9	L	PC	Pie	Own	Zen	V	Rem	Rem	D. B-L	B-L 55	A	4	Spi	Tim 6570	W	F	8.5	45.4	A	Shu 5550	Row	Ros	Day	.....	6500
Maccar 66	....	166	S 36x5	S 36x10	Bud BUS	6-4x5⅛	38.4	L	PC	Non	Own	Zen	V	Rem	Rem	D. B-L	B-L 55	A	4	Spi	Tim 6570	W	F	8.5	45.4	A	Shu 5550	Row	Ros	Day	.....	6650
												Str		Spl	.....	D. Ful	Ful G	A	4	Spi	Tim 656960D	W	F	.....	.....	A	Tim 1544B					
																					Tim 6566				45.5	A	Tim 1544B	Mat	Ros	Van	.....	6200

Lange		156	S 36x4	S 36x10	Con 6B	6-3¾x5	33.8	L	FP	Non	Own	Str	V	Apo	Non	D. B-L	B-L 55	U	4	Pet	Tim 6570 D	W	F	9.25	49.5	A	Tim 1544B	SP	Ros	Hoo	Opt	6450							
Maccar 64		166	S 36x5	S 36x10	Wis UAU	4-4¾x6	28.9	L	PC	Pie	Own	Zen	V	Rem	Rem	D. B-L	B-L 55	A	4	Spi	Tim 6570	W	F	8.5	45.4	A	Shu 5550	Row	Ros	Day		6500							
Maccar 66		166	S 36x5	S 36x10	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	Rem	Rem	D. B-L	B-L 55	A	4	Spi	Tim 6570	W	F	8.5	45 4	A	Shu 5550	Row	Ros	Day		6650							
Master 45		154°	S 36x5	S 36x10	Jackson	4-4¼x6⅝	28.9		FP			Str		Spl		D. Ful	Ful G	A	4	Spi	Tim 6560D	W				A	Tim 1544B		Ros										
National T		152	S 36x5‡	S 36x10‡	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Bus	Zen	G	Bos	Non	O. H-S	B-L 51	A	4	Spi	Tim 6566	W	F	8.5	45.5	A	Tim 1544B	Mat	Ros	Van		6200							
National 40	4350	169	P 36x6	P 36x10	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	McK	Zen	G	Bos	Bos	O. H-S	B-L 51	A	4	Spi	Tim 6570	W	F	8.5	45.5	A	Tim 1544B	Mat	Ros	Van	Fir	6300							
National 41	4500	179	S 36x6	P 36x10	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	McK	Zen	G	Bos	Bos	O. H-S	B-L 51	A	4	Spi	Tim 6570	W	F	8.5	45.5	A	Tim 1544B	Mat	Ros	Van	Fir	6300							
Netco C	3900	169°	S 36x5‡	S 36x10‡	Her L	4-4½x5¾	32.4	L	PC	Opt	Bus	Zen	V	Spl	Bos	D. Ful	Ful	A	8	Blo	She W21	W	F	9.25	49.4	A	Tim 1544B	Mat	Ros	Smi		6800							
Noble D-52	3500	162°	S 36x5	S 36x10	Bud ETU	4-4¼x5½	28.9	L	PC	McC	Chi	Str	V	Spl		D. B-L	B-L 51	U	4	Pet	Tim 6570	W	F	9.25	49.5	A	She 370	Tut	Lav	Bim	Non	5800							
Oshkosh H	4175	146	S 36x6	S 36x8	Her L	4-4½x5⅝	32.4	L	FP	Pie	Own	Zen	V	Spl		D. B-L	B-L 51	U	4	Blo	Own H	R	F	9.25	49.5	B	Own H	Tut	Han	StM	Gdy	6975							
Oshkosh HH	4275	165	S 36x6‡	S 36x8‡	Her L	4-4½x5¾	32.4	L	FP	Pie	Own	Zen	V	Spl		D. B-L	B-L 51	U	4	Blo	Own H	R	F	9.25	49.5	A	Own H	Tut	Han	StM	Gdy	7085							
Patriot 55		156	S 36x5	S 36x10	Hin 200	4-4½x5½	32.4	L	FP	Non	Own	Zen	V	Bos		D. B-L	B-L 51	A	4	The	Tim 6566	W	F	9.25	49.5	A	Shu	Mat	Ros	Bim	Fir	5500							
Patriot 55X		156	S 36x5	S 36x10	Hin 200	4-4½x5½	32.4	L	FP	Non	Own	Zen	V	Bos		D. B-L	B-L 55	A	7	The	Tim 6566	W	F	8.50	80 7	A	Shu	Mar	Ros	Bim	Fir	5600							
Pierce-Arrow XB	3750	150	S 36x5‡	DS36x5‡	Own XB	4-4x5½	25.6	T	FP	Own	Own	Str	P	Del	Del	D. Own	Own XB	A	4	Spi	Own XB	W	½	9.25	48.1	A	Own XB	S P	Own	Bet	Opt	6280							
Rainier R20		165°	S 36x4	S 36x10	Con K4	4-4½x5¾	27.2	L	FP	Pie	Bus	Zen	V	RBo	Del	D. B-L	B-L 55	A	7	Spi	Tim 6566	W	F	9.25	87.89	A	Tim 1544	She	Ros	Van		5500							
§Rehberger B-1		192	P 36x6	DS36x6‡	Bud YBU	4-4½x6	32.4	L	PC		Bus	Zen	G	RBo	Bos	D. B-L	B-L 55	U	4	Spi	Tim 6566	W	F	6.75	36.1	A	Shu 5550B	Del	Gem	Bud	Fir	6510							
§Rehberger B-2		192	P 36x6	DS36x6‡	Bud BUS	6-4x5½	38.4	L	PC		Bus	Zen	G	RBo	Bos	D B-L	B-L 55	U	4	Spi	Tim 6566	W	F	6.75	36.1	A	Shu 5550B	Del	Gem	Bud	Fir	6470							
Rehberger B		162	S 36x5	S 36x10	Bud YBU	4-4½x6	32.4	L	PC	K-P	Bus	Zen	G	RBo	Bos‡	D. B-L	B-L 51	U	4	Spi	Tim 6566	W	F	8.5	45.5	A	Tim 1544B	Del	Gem	Van	Fir	6460							
Republic 25		165°	S 36x5	S 36x10	Con K4	4-4½x5¼	27.2	L	FP	Pha	Own	Str	V	Bos	Bos‡	D. Ful	Ful	U	4	U-M	Eat	I	D	8.40	40.3	B	Eat	Mat	Jac	Van	Fir	5400							
Republic 25W		165°	S 36x5	S 36x10	Wau FU	4-4x5¾	25.6	L	PC	Wau	Own	Str	V	Bos	Bos‡	D. Ful	Ful	U	4	U-M	Eat	I	D	8.40	40.3	B	Eat	Mat	Jac	Van	Fir	5400							
Ruggles 40-H		148	S 36x4‡	S 36x8	Her O	4-4x5	25.6	L	PC	Non	Per	Zen	G	Bos	Rem‡	D. B-L	B-L 35	U	4	Spi	Wis 88EF	R	F	7.85	42.0	A	Shu 5550	Det	Jac	Nor	Fir	4850							
Ruggles 4OHRB		115	S 36x5‡	S 36x10	Her O	4-4x5	25.6	L	PC	Non	Per	Zen	G	Bos	Rem‡	D. B-L	B-L 35	U	4	Spi	Wis 88EF	R	F	7.85	42.0	A	Shu 5550	Det	Jac	Nor	Fir	4700							
§Schacht L	4000	156	S 36x5	S 36x12	Wis RCU	4-4½x6	32.4	L	PC	Pie	Oen	Zen	G	Bos	Non	D. B-L	Own	A	4	Spi	Wis	R	F	10.4	49 4	B	Own	She	Own	Dav		7500							
Selden Roadmaster		154°	P 32x6	DS36x8‡	Con 6B	6-3¾x5	33.7	L	FP	Non	Own	Str	V	Bos	Bos	D. B-L	B-L 35	U	4		Cla 720	W	½	Opt	Opt	A	Tim 1452		Ros	Van	Fir	4740							
§Selden Unit 53		154°	S 36x4	DS36x4	Con L4	4-4½x5½	32.4	L	FP	Pha	Lon	Str	G	Eis	Bos	D. B-L	B-L 51	A	4	Spi	Tim 6566	W	F	8.50	45.4	A	Tim 1544B	Det	Gem	Std	Opt	6220							
Stoughton F		156	S 36x5	S 36x5	Own	4-4½x5¼	27.2	L	FP	Sim	Own	Zen	G	Bos		. B-L	B-L 50	U	4	The	She W21	W	½	8.75	46.8		She D370	Own	Ros	Bim	Gdy	5900							
Super Truck 70-D		126	P 36x6	P 40x10	Wis X	4-4½x5	32.4	H	PC	Tac	Chi	Zen	G	Bos	Non	D. Ful	Ful H	A	4	Spi	Wis 120EA	R	½	7.28	45.8	A	She D370		Ros	Cla	Fir	6405							
Traffic 6000	2295	135	S 36x4‡	S 36x7‡	Con S4	4-4¼x5½	28.9	L	PS		Own	Zen	G	Spl	Wes†	D. M-E	Own D-4-U	U	4	M-E	She W-21	W	½	7.75	37.0	A	She D-343	Mer	Ros	Sch		5850							
Traylor D	3400	150	S 36x4‡	S 36x8	Bud ETU	4-4¼x5½	28.9	L	PC	Pie	G&O	Zen	G	Spl	Wes†	D. B-L	B-L 35	U	4	Blo	Wis 88E	R	½	8.66	46.3	A	Shu 510	Det	Lav	Van		4630							
United 60		156	S 36x5	S 36x10	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Bos	Non	D. B-L	B-L 35	A	4	Pet	Cla	I	D	8.00	44.0	A	Tim	Mat	Ros	Own	Fir	5700							
Winther-Kenosha 54	3500	152	S 36x5‡	DS36x4	Wis	4-4¼x6	28.9	L	FP	Sim	Own	Str	V	Bos	Bos	P. B&B	B-L	U	4	Pet	Cla	I	D	8.00	44.0	B	Own	Mat	Ros	Own	Fir	6400							
Winther-Kenosha 454	4200	152	S 36x5‡	DS36x5	Wis	4-4¼x6	28.9	L	FP	Sim	Own	Str	V	Bos	Bos	P B&B	B-L	U	4	The	She	W				A	She		Own	Ros									
Wichita 60U		160	S 36x5	S 36x8	Wau CU	4-4⅜x5¾	30.6					Str				N-E	D. B-L	B-L	U	4	Spi	Tim 6566	W	F	9.25	40.0	A	Tim 1544	She	Ros	Arc	No	5500							
Witt-Will SS	3400	Opt	S 36x4‡	S 36x10	Con K4	4-4½x5¼	27.2	L	FP	Pie	Own	Zen	V	Eis	Bos	D. B-L	B-L 51	U	4	Spi	Tim 6566	W	F	9.25	40.0	A	Tim 1544	She	Ros	Arc	No	5500							
3½ Ton																																					
American La France Y	4950	Opt	S 36x6	DS36x6	Own 3R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos	Bos‡	D. Own	Own 3R	A	4	Own	Own 3R	W	F	8.75	47.6	B	Own 3R	Mer		Day	Non	8600							
Atterbury 22D		174°	S 36x5	DS36x6	Con L4	4-4½x5½	32.4	L	FP	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 55 Max	A	7	Spi	Tim 6666	W	F	8.75	83.1	A	Tim 1632B	S.P	Gem	Arc	Non	7500							
Available L3½		176	S 36x5	S 36x10	Her L3	4-4½x5¾	32.4	L	PC	Pie	Chi	Str	G	Bos	Bos‡	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	10.3	56.1	A	Con 2203	Tut	Ros	Bim	Non	6500							
Bethlehem M	3795	168	S 36x5	S 36x6	Own H	4-4x5¼	25.6	L	FP	Pie	Bus	Zen	V	Bos	G&D	D. Ful	Ful GU15	U	4	Spi	Wis 120FG	R	½	10.4	49.9	A	She D-370	Mat	Lav	Smi		6300							
Bethlehem CS	4425	145	S 36x6	S 36x6	Own H	4-4x5¼	25.6	L	FP	Pie	Bus	Zen	V	Bos	G&D	D. B-L	B-L 55	A	7	Spi	Wis 120FG	R	½	10.4	98.0	A	She D370	Mat	Lav	Smi	Non	6800							
Biederman		180°	S 36x6	S 36x12	Con 6B	6-3¾x5	33.7	L	PC	Han	Own	Zen	G	Del	Del	D. B-L	B-L 51	A	4	Spi	Tim	W	F	9.5	52.0	A	Shu	Mat	Ros	Bet	Non	7000							
Chicago 35		183°	S 36x5	S 36x10	Her L	4-4½x5¾	32.4	L	PC	Pie	Chi	Zen	G	Apo	Non	D. B-L	B-L 55	A	4	Pet	Tim 7666	R	F	9 15	48 95	A	Tim 1632	Mat	Gem	Smi	Non	7320							
Commerce "Relay" 30		156	P 36x6	S 40x12	Con 6B	6-3¾x5	33.7	L	PC			Zen	V	Bos	Bos	D. Cov	Cov SH	A	4	Blo	Relay			9.00	49.9	B	Tim 1526	Bea	Ros	Smi	Fir	7065							
Diamond T K2		170	S 36x5	S 36x5	Her L	4-4½x5¾	32.4	L	FP	Mer	G&O	Str	V	Bos	Non	D. Cov	Cov SB	A	4	Spi	Tim 6666	W	F	8.75	44.36	A	Tim 1632B	Mat	Gem	Int	Non	7900							
Dixon A	4070	160	S 36x5	S 36x10	Her	4-4¾x5¾	36.1	L	FP	Pie	G&O	Zen	G	Bos	Non	D. Ful	Ful HU	A	8	Har	Tim 6666	W	F	Opt	Opt	A	Tim 1630B	S.P	Ros	Smi	Non	7300							
Duplex E		130	S 36x8‡	S 36x8	Bud EBU-I	4-4¼x5½	28.9	L	PC		Lon	Zen	V	Eis	Opt	D. B-L	B-L 50	U	4	Pet	Own E	I		8.00	64.0	B	Own E	Pen	Woh	Mot	Fir	6000							
Eagle 106		144°	S 36x6	S 36x12	Bud YTU	4-4½x6	32.4	L	PC		Own	Zen	G	Eis		D. B-L	B-L 60	A	7	Pet	Own 106	R	F	10 4	115.0	A	Own 30	Cla	Ros	Smi		8600							
Gary Y35	4250	162	S 36x5	S 40x12	Bud,YBU-I	4-4½x6	32.4	L	PC		Chi	Str	V	Eis		D. Ful	Ful	A	4	Spi	Tim 6666	W	F	10.3	50.0	A	Tim 1632B	Mar	Ros	Day	Non	8100							
G.M.C. K-72A		160	S 36x5	S 40x12	Own	4-4½x6½	32.4	L	FP	Own	McC	Mar	G	Eis	Rem	D. Own	Own 72A	A	7	Own	Tim 6666	W	F	8.75	75.4		Tim 1632B	Det	Own	Day	Non	8140							
G.M.C. K-72B		184	S 36x5	S 40x12	Own	4-4½x6½	32.4	L	FP	Own	McC	Mar	G	Eis	Rem	D. Own	Own 72	A	7	Own	Tim 6666	W	F	8.75	75 0	B	Con	Det	Ros	Bim	Fir	6200							
Grass Premier 90	3900	160°	S 36x5	S 36x5	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Chi	Str	V	Bos	Bos	D. B-L	B-L 55	A	7	Spi	Tim 6666	W	F	8.75	75.4		Tim 1632B	Det	Own	Day	Non	8950							
Harvey WHB	4250	160°	S 36x6‡	S 36x12	Bud YBU-I	4-4½x6	32.4	L	PC		Own	Str	G	Eis	Non	D. Ful	Ful	A	4	Spi	She W-32	W	½	10.25	54.8	A	She 4FA20	Bea	Ros	Smi		7850							
Kearns T		160°	S 36x5	DS36x5‡	Wis VAU	4-4½x6	32.4		SP		Own	Zen				D. Ful	Ful	A	4		She	W	½			A	She		Ros									
Kelly Springfield KS35	3900	155	S 36x5‡	S 36x12‡	Con L4	4-4½x5½	32.4	L	FP	Pie	Own	Zen	G	Eis	Del	P. B&B	B-L 55 Max	A	7	Pet	Own	W	F	7.6	72.0	A	Own	Mat	Ros	Smi		6700							
King Zeitler 75		156°	S 36x6‡	S 40x12‡	Con L4	4-4½x5½	32.4	L	FP	Pha	Chi	Str	G	Eis	Bos‡	D. B-L	B-L 55	A	4	Pic	Tim 6666	W	F	10.3	55.2	A	Tim 1632B	Mar	Gem	StM	Fir	7200							
Kleiber	4850	170	S 36x5‡	DS36x6‡	Con B5	4-4¾x6	36.0	L	FP	Non	R-T	Str	V	RBo	Bos‡	D. B-L	B-L 60	A	4	Spi	Tim6666	W	F	8.75	46 8	A	Tim 1632B	Bet	Ros	Smi		7600							
Lange F	4650	168°	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	K-P	Own	Str	V	Apo	Non	D. B-L	B-L 55	A	4	Pet	Tim 6666	W	F	9 50	50.8	A	Tim 1632B	S.P	Ros	Hoo	Opt	8100							
Larrabee L-6		192	S 36x5‡	S 36x10‡	Con B5	4-4¾x6	36.0	L	FP	Pha	R-T	Zen	G	Bos	Bos‡	D. B-L	B-L 60	A	7	Spi	She W-32	W	½	8.75	55.0	A	She 4FA20	She	Ros	Smi	Non	9820							
LeMoon GP4		Opt	S 36x5	S 36x5	Con L4	4-4½x5½	32.4	L	FP	Pha	Chi	Str	G	Bos	Bos‡	D. B-L	B-L 55	A	4	Own	Tim 6666	W	F	8.75	42.0	A	Tim 1630B	Tut	Ros	StM	Non	6000							
Mack AC		156°	S 36x5	DS40x5‡	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	•7.54	48 4•	D	Own AC	Mer	Own			8400							
Master 51		158°	S 36x5	S 40x12	Bud YBU-I	4-4½x6	32.4		FP			Str		Spl		D. Ful	Ful H	A	10		Tim 6666	W				A	Tim 1630B		Ros			8400							
Master 55		158°	S 36x5	S 40x12	Jackson	4-4¼x6⅝	28.9		FP			Str		Spl		D. Ful	Ful H	A	10		Tim 6666	W				A	Tim 1630B		Ros			8400							
National 50		169	P 36x6	P 36x12	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	McK	Zen	G	Bos	Bos	O. H-S	B-L 55	A	7	Spi	Tim 6570	W	F	8.58		A	Tim 1544B	Mat	Ros	Van	Fir	7000							
National 51		179	P 36x6	P 36x12	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	McK	Zen	G	Bos	Bos	O. H-S	B-L 55	A	7	Spi	Tim 6570	W	F	8.58		A	Tim 1544B	Mat	Ros	Van	Fir	7400							
Noble E-71	3995	164°	S 36x5‡	S 36x12‡	Bud YTU	4-4½x6	32.4	L	PC	Pie	Chi	Str	V	Spl	Bos	D. Ful	Ful	A	7	Spi	Tim 6570	W	F	8.75	44.0	A	She 4FA20	Tut	Lav	Bim	Fir	7250							
Noble E-71	3995	164°	S 36x5‡	S 36x12‡	Bud YTU	4-4½x6	32.4	L	PC	Pie	Chi	Str	V	Spl	Bos	D. Ful	W-G T53	A	4	Blo	She W-30	W	½			A	She 4FA20	Tut	Lav	Bim	Fir	7250							
O. K	3975	164	S 36x5	S 36x10	Bud YTU	4-4½x6	32.4	L	PC	Pie	R-T	Zen	V	Eis	Non	D. Ful	Ful H	A	4	Har	Tim 6666	W	F			A	Shu 610	Tem	Ros	Bim	Gdy	6550							
Rainier R-25		170	S 36x5	S 36x12	Con B7	4-5x6	40.0	L	FC	Pie	Bus	Zen	V	RBo	Del	D. B-L	B-L 60	A	4	Spi	Tim 6666	W	F	10.3	96.82	A	Tim 1632B	She	Ros	Van	Non	8000							
Sandow M		175	S 36x5	S 36x12	Bud YTU	4-4½x6	32.4	L	PC	Mon	Chi	Str	G	Bos	Non	D. B-L	B-L 51	A	4	Spi	Tim 6666	W	F	10.3	96.82	A	Tim 1632B	She	Ros	Van	Non	8000							
Sanford W-4-35A		174	S 36x6	S 36x12	Con B7	4-5x6	40.0	L	FP	Non	R-T	Str	G	Con	Dyn	D. Ful	Ful	A	4	Spi	She 82	W	½	10 25	64.6	A	She 4FA20	She	Ros	Van		8800							
Sanford W-4-35CS		156	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	Non	R-T	Str	G	Con	Dyn	D. Ful	Ful 2S	A	4	Spi	She 32	W	½	10.25	109.7	A	She 4FA20	She	Ros	Van		8350							
Schacht L	4000	156	S 36x5	S 36x12	Wis RCU	4-4½x6	32.4	L	PC	Pie	Own	Zen	G	Bos		D. B-L	Own	A	8	Spi	Own	R	F	10.4	49.4	B	Own	She	Ros	Van		7500							
Selden Unit 70		165°	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	FP	Pha	Lon	Str	G	Eis	Bos	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	10.3	55.1	A	Tim 1650B	Per	Gem	Std		7200							
Service 81		173	S 36x5	S 36x12	Bud YBU-I	4-4½x6	32.4	L	PC	Non	Own	Str	V	Eis	Rem	D. B-L	B-L 60	A	4	Spi	Tim 6666	W	F	7.8	74 0	A	Tim 1632	She	Ros	Int		8080							
Standard 3½-5 K		160°	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Sim	Lon	Str	V	Eis	Bos‡	D. B-L	B-L 55	A	7	Spi	Tim 6666	W	F	6 80	83.1	A	Tim 1630B	Amc	Gem	Day	Non	7485							
Standard 3½-5KS		160°	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Sim	Lon	Str	V	Eis	Bos‡	D. B-L	B-L 60	A	7	Spi	Tim 6666	W	F	6.80	83.1	A	Tim 1630B	Amc	Gem	Day	Non	7519							
Sterling DW14		160°	S 36x4	S 36x8	Own CU	4-4¾x5¾	30 6	L	PC	Wau	Own	Zen	V	Eis		D. B-L	B-L 51	A	4	Spi	Tim	W	F	7 2	38.8	A	Col 8503	Det	Ros	Cla	Fir	6600							
Stewart 10-X	3895	165	S 36x5‡	S 36x5	Bud YTU	4-4½x6	32.4	L	PC	Pie	Bus	Zen	V	Eis	Eis	D. Ful	Ful GU-6	U	3	Spi	Cla 3-D	I	D	10 0	48.0	B	Tim	Mat	Ros	Hoo		5500							
Super Truck 70	4100	164	S 36x5	DS40x5	Wis UAU	4-4¾x6	28 9	L	PC	Sim	Chi	Zen	G	Bos	West	D. Ful	Ful G	A	4	Spi	She W-32	W	½	10.2	49.2	A	She 4FA20	She	Ros	Smi	Non	7500							
Traffic	3000	140	S 36x4	S 40x10	Con S4	4-4½x4½	32.4	L	PC	Pie	Own	Zen	V	Bos	Bos	D. Ful	Ful	U&A	8		Tim	W	F	8.75		A	Tqr	Det	Ros	Bim		6120							
Twin City AW	3750	168	S 36x6‡	S 40x12‡	Own TW	4-4¾x6	28.9	H	PC	Own	Mod	Str	V	Spl	Bos‡	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	10.3	61.9	A	Tim 1630B	Mat	Ros	Smi	Fir	7200							
U. S. S	3650	168°	S 36x5	DS36x5	Hin 200	4-4½x5½	32.4	L	PC	Hin	Own	Str	V	Eis		D. Ful	Ful GU14	U&A	8	U-M	Wis 120BG	R	½	10.2	54.8	A	She 4FA20	She	Lav	Sch	Non	7100							
Victor 80	3725	160	S 36x5‡	DS36x5	Con L4	4-4½x5½	32.4	L	FP	Pie	Per	Zen	G	Bos		D. B-L	B-L 55	A	4	Spi	Tim	R	½	9.5	218.88	A	Shu 610	Det	Lav	Smi		7000							
Ward La France 4B		172	S 36x5	DS36x5	Wau DU	4-4½x6¼	32.4	L	DC	Wau	Own	Str	G	Bos		A-L	B-L 55	A	4	Spi	Tim	R	F	7.25	38.8	A	Tim	Row	Ros	Hoo		6800							
White 40	4200	174°	S 36x5‡	DS40x5	Own GR	4-4¼x5¾	28.9	L	PC	Wau	Own	Zen	V			L-N‡	P. Own	Own	U	4	Spi	Own	R	F	11.7	57.46	B	Own		Own		Non	7130						
Wilcox E	3950	147	S 36x5	DS36x5	Bud YTU	4-4½x6	32.4	L	PC	Dup	Own	Str	G	Bos	Wes‡	D.	Own EA	A	4	Own	Wal 5A	R	½	10.0	45.1	B	She 4FA20	She	Own		Non	6600						

UNIVERSITY OF MICHIGAN LIBRARIES

Trade Name and Model	General: Chassis Price	General: Standard Wheelbase (inches)	General: Tire Size: Front (inches)	General: Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Engine: Fuel System: Carburetor (Make)	Engine: Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Springs (Make)	Steering Gear (Make)	Wheels (Make)	Rims (Make)	Chassis Weight (lbs.) (stripped)
4 Ton																																
Acorn 70	4250	166	S 36x5	S 40x10	Bud YBU-I	4-4½x6	32.4	L	PC	.....	Chi	Zen	G	RBo	.....	D. B-L	B-L 60	A	4	Spi	Tim 6666	W	F	10 25	49.6	A	Tim 1632B	She	Ros	Int	.....	7400
Armleder 70	....	156°	S 36x6	DS36x6	Bud YBU-I	4-4½x6	32.4	L	PS	Han	Own	Zen	V	Bos	Bos	D. B-L	B-L	U	4	Spi	Tim	W	F	10.3	55 3	B	Tim	She	Ros	Smi	Non	7500
Available I4	....	154	S 36x5	S 36x12	Her L	4-4½x5¾	32.4	L	PC	Pie	Chi	Str	G	Bos	Bos‡	D. B-L	B-L 55 Max	A	7	Spi	Tim 7666	R	F	9.15	96.5	A	Con 2203	Tut	Ros	Int	Non	7800
Brockway R	....	164	S 36x5	DS36x5‡	Con L4	4-4½x5½	32.4	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	8.75	.....	A	Tim 1632	She	Ros	Day	Non	7075
Brockway R14	....	165⅛	S 36x5	DS36x5‡	Con L4	4-4½x5½	32.4	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 55	A	7	Spi	Tim 6666	W	F	8.75	.....	A	Tim 1632	She	Ros	Day	Non	7075
Brockway RT	....	175	S 36x5	S 36x10	Con B5	4-4¾x6	36.1	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 60	A	4	Spi	Tim 6666	W	F	8.75	.....	A	Tim 1632	She	Ros	Day	Non	7500
Brockway RH	....	168	S 36x5	S 36x10	Wis H6	6-4x5	38.4	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 55	A	7	Spi	Tim 6666	W	F	8.75	.....	A	Tim 1632	She	Ros	Day	Non	7075
Clinton 90	....	190	S 36x5	DS36x6	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	G	Bos	Bos	D. B-L	B-L 55	A	4	Blo	Tim 6666	W	F	8.75	46.8	A	Tim 1632B	Per	Ros	StM	.....	8000
Clinton 90M	....	190	S 36x5	DS36x6	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	G	Bos	Bos	D. B-L	B-L 55 Max	A	7	Blo	Tim 6666	W	F	8.75	83.1	A	Tim 1632B	Per	Ros	StM	.....	8050
Corbitt A	....	178	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Sim	MeC	Str	V	Eis	Bos‡	D. B-L	B-L 55	A	7	Spi	She W-32	W	½	13 0	69.5	A	She 4FA20	She	Ros	Smi	Non	7370
Day-Elder K	....	162°	S 36x5	S 36x12	Bud YBU	4-4½x6	32.4	L	PC	Mon	Bus	Zen	V	Eis	Bos†	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	10.33	55 3	A	Tim 1632B	I.C.	Gem	Van	Fir	8500
Denby 27	....	170	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	PC	.....	Lon	Zen	G	Eis	.....	D. Ful	Ful	A	4	U-P	Cla	I	D	10.0	49.9	...	Tim	Det	Ros	Smi	.....	7020
Dorris K8	4385	Opt	S 36x5‡	S 36x12	Own	4-4¼x5½	28.9	H	PS	Own	MeC	Str	G	Bos	Bos	D. Own	B-L 55	A	4	Spi	Tim 6666D	W	F	10.3	51.5	A	Tim 1632B	Mat	Ros	Day	Fir	7510
Fageol 445	4950	172	S 36x6	DS36x6	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	V	Bos	Bos	D. B-L	B-L 55	U	4	Spi	Tim 6666	W	F	8.75	45.8	A	Tim 1632B	Mat	Ros	Van	.....	8525
Federal W3	4200	157	S 36x5	DS40x5	Con L4	4-4½x5½	32.4	L	FP	Pha	Own	Zen	V	Eis	Rem	P. B&B	Own WL	A	4	Spi	Tim 6666	W	F	10 3	61 0	A	Tim 1630B	Mat	Gem	Smi	Fir	7000
Garford 80	4950	162	S 36x5	S 36x12	Bud BTU	4-5x6½	40.0	L	PC	K-P	Own	Zen	G	Spl	A-L	D. Own	B-L 60 Max	A	7	B-G	Tim 6666	W	F	8.75	83.1	A	Tim 1632B	Per	Ros	Bet	Non	8700
Gotfredson 80	....	160½°	S 36x6	S 40x14	Bud YBU-I	4-4½x6	32.4	L	PC	Sim	MeC	Zen	V	RBo	Rem	D. B-L	B-L 55 Max	A	7	Spi	Tim 6666	W	F	10 3	55.3	B	Tim 1632B	Det	Ros	Day	Non	8400
Gotfredson 86	....	169½°	S 36x6	S 40x14	Bud GL6	6-4½x6	48.6	L	PC	Sim	MeC	Zen	V	RBo	Rem	D. B-L	B-L 55 Max	A	7	Spi	Tim 6666	W	F	10.3	55.3	B	Tim 1632B	Det	Ros	Day	Non	8600
Gramm-Bernstein 40	....	156°	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful H1	A	8	Own	She W32	W	½	8.75	93 6	B	She 4-FA-20	Per	Ros	Smi	Non	8360
Gramm-Kincaid 848O	....	152°	S 36x5‡	S 36x5‡	Her L	4-4½x5½	32.4	L	FP	Pie	Own	Zen	G	Bos	A-L	D. Ful	Ful H	A	8	Thei	Wis 120BG	R	½	6.60	120.6	B	Wis 30	Mat	Ros	Smi	Non	8360
Gramm-K. P.(low bed)	....	230°	S 36x5‡	S 36x5‡	Her L	4-4½x5½	32.4	L	FP	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful GU	U	4	Thei	Wis 125K	R	½	8.6	41.3	B	She D445	Mat	Ros	Smi	Non	8560
Guider J	....	170	S 36x5	DS36x6	Bud YTU	4-4½x6	32.4	L	PC	Pie	G&O	Zen	G	Eis	Non	D. B-L	B-L 55	A	4	M-E	Wis 1200	R	F	7.50	54.0	A	Shu 610	Mer	Ros	Van	Van	7500
Hahn M	5100	160°	S 36x5	S 36x12	Con B5	4-4¾x6	36.1	L	FP	Pha	Chi	Str	G	Bos	L-N	D. B-L	B-L 60	A	7	Spi	Tim 6666	W	F	10.25	.....	A	Tim 1632B	Mer	Ros	Day	Opt	7200
Indiana 41	....	170	S 36x6	S 40x12	Wau DU	4-4½x6¼	32.4	..	PC	Wau	MeC	Str	V	Eis	Rem	P. B&B	B-L 60	A	4	Spi	She W32	W	½	10.25	97.3	A	She 4FA20	Bea	Ros	Smi	.....	9175
Kenworth L	4500	170	S 36x5‡	S 40x12	Bud YBU	4-4½x6	32.4	L	PC	Non	Own	Zen	V	RBo	Rem	D. B-L	B-L 60	A	4	Spi	She W-32	W	½	8.75	53.3	A	She 4FA20	Lah	Ros	Smi	.....	8800
Kissel Heavy Duty	....	168	S 36x5‡	S 36x12‡	Wau DU	4-4½x6¼	32.4	L	PC	Pie	MeC	Str	V	Eis	Rem‡	D. W-G	Ful H	A	4	Spi	She W-32	W	½	11.7	73.6	A	She 4FA20	She	Ros	Smi	Non	7600
Maccar 94	....	171	S 36x5	S 36x12	Wis VAU	4-4½x6	42.4	L	PC	Pie	Own	Zen	V	Rem	Rem	D. B-L	B-L 60	A	4	Spi	Tim 6666	W	F	8.75	46.8	A	Shu 610	Row	Ros	Day	.....	7500
Maccar 96	....	171	S 36x5	S 36x12	Wis H6	6-4x5	38.4	H	PC	Non	Own	Zen	V	Rem	Rem	D. B-L	B-L 60	A	4	Spi	Tim 6666	W	F	8.75	46.8	A	Shu 610	Row	Ros	Day	.....	7650
Master 55	....	158°	S 36x5	S 40x12	Jackson	4-4¼x6⅝	28.9	..	FP	.....	.....	Str	V	Spl	.....	D. Ful	Ful 60	.....	..	.....	Tim	...	...	.....	.....	A	Tim	....	Ros	.....	.....	.....
Moreland AXX4	4780	160°	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Non	Own	Str	V	Spl	A-L	. Own	B-L 55	A	7	Pet	Tim	W	F	7.75	73.5	...	Tim	U.S.	Ros	Smi	Fir	6300
Moreland AXX5	4840	164°	S 36x5	S 36x10	Con 6B	6-3¾x5	33.7	L	FP	Non	Own	Str	V	A-L	A-L	Own	B-L 55	A	7	Pet	Tim	W	F	7.75	73.5	...	Tim	U.S.	Ros	Smi	Fir	6300
Netco J	4850	175°	S 36x6‡	S 36x12‡	Her G	4-4¾x5¾	36.1	L	PC	Opt	Bus	Zen	V	Bos	Bos	D. B-L	B-L 55 Max	A	7	Pet	Tim 6666	W	F	10.3	97.8	A	Tim 1632B	Mat	Ros	Smi	.....	8500
Noble E-72	4150	164	S 36x5	S 36x12	Bud YTU	4-4½x6	32.4	L	PC	Pie	Chi	Str	V	Spl	Bos	D. Ful	W-G	A	8	Blo	She W30	W	½	8.75	93.6	A	She 4FA20	Tut	Lav	Bim	Non	7300
Pierce Arrow WC	5100	162	S 36x5‡	DS36x6	Own WC	4-4½x6¾	32.4	T	FP	Own	Own	Str	P	Del	Del	D. Own	Own WC	A	4	Spi	Own WC	W	½	8 00	41.5	B	Own WC	S.P	Own	Bet	.....	8490
Rehberger C	....	174	S 36x6	S 36x12	Bud YBU	4-4½x6	32.4	L	PC	K-P	Bus	Zen	G	RBo	Bos‡	D. B-L	B-L 55	U	4	Spi	Tim 6666	W	F	8.75	46.8	A	Tim 1632B	Del	Gem	Van	.....	7940
Schacht	4400	168	S 36x5	DS40x6	Wis RCU	4-4½x6	32.4	L	PC	Pie	Own	Zen	G	Bos	Non	D. B-L	Own	A	8	Spi	Own	W	F	11.6	55.4	B	Own	She	Own	StM	Non	7800
Selden 73	....	168°	S 36x5‡	DS36x6	Con B5	4-4¾x6	36.1	L	FP	Pha	Lon	Str	G	Eis	Bos	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	8.75	46.8	A	Tim 1630B	S.P	Gem	Std	.....	7720
Union H	....	174	S 36x6	S 36x10	Wis VAU	4-4½x6	32.4	L	PC	Dup	G&O	Zen	G	Eis	L-N	D. Ful	Ful H	U	4	U-P	Wis 1200	R	F	10.2	49.2	B	Shu 650	Mat	Jac	Smi	Gdy	7700
Union HW	....	174	S 36x6	S 40x12	Wis VAU	4-4½x6	32.4	L	PC	Dup	G&O	Zen	G	Eis	L-N	D. Ful	Ful H	A	1	U-P	Wal 5A	R	F	10 5	63.0	A	Shu 650	Mat	Jac	Smi	Gdy	7750
U. S. S. Special	3950	168°	S 36x6	DS40x6	Hin HA200	4-4½x5½	32.4	L	PC	Hin	Own	Str	V	Spl	Bos‡	D. B-L	B-L 55	A	4	Blo	She W-32	W	½	11.7	62.8	A	She 4FA20	She	Lav	Smi	Non	7500
Winther-Kenosha 74	4200	150	S 36x5	DS36x5	Wis VAU	4-4½x6	32.4	L	FP	Pie	Own	Str	V	Bos	Bos	P. B&B	B-L	A	7	Pet	Cla	I	D	9.0	86.0	A	Tim	Mat	Ros	Cla	Fir	7600
Winther-Kenosha 474	5000	150	S 36x5	DS36x5	Wis VAU	4-4½x6	32.4	L	FP	Pie	Own	Str	V	Bos	Bos	P. B&B	B-L	U	4	Pet	Cla	I	D	10.0	65.0	A	Own	Mat	Ros	Cla	Fir	8300
Witt-Will A	4750	172	S 36x6	DS40x6	Con B5	4-4¾x6	36.1	L	PC	Pie	Own	Zen	G	Eis	Bos	D B-L	B-L 60	A	4	Spi	Tim 6760	W	F	10 2	53.3	A	Tim 1732B	She	Ros	Smi	Non	9500
4½ Ton																																
Republic 30	....	170°	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Pha	Own	Str	V	Bos	Bos‡	D. Ful	Ful	U	4	U-M	Eat	I	D	10.2	49.2	B	Wis	Mat	Lav	Van	Fir	6700
Republic 30W	....	170°	S 36x5	S 36x12	Wau CU	4-4⅝x5¾	30.6	L	PC	Wau	Own	Str	V	Bos	Bos‡	D. Ful	Ful	U	4	U-M	Eat	I	D	10.2	49.2	B	Wis	Mat	Lav	Van	Fir	6700
5 Ton																																
Acme 90L	....	177	S 36x5‡	S 40x12	Con B7	4-5x6	40.0	L	FP	Mon	G&O	Ray	V	Bos	Bos	P. B&B	Cot S	A	4	Blo	Tim 6666	W	F	8.75	45.5	A	Tim 1632	Det	Ros	Bim	.....	8160
Amer. La France V	5500	Opt	S 36x7	DS40x7	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos	Bos‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.5	B	Own 5R	Mer	.....	Day	Non	9600
Atterbury 24E	....	174°	S 36x6	DS40x7	Con B7	4-5x6	40.0	L	FP	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 60 Max	A	7	Spi	Tim 6760	W	F	11.6	110.7	A	Tim 1732B	S.P	Gem	Std	Non	9500
Autocar L	156		S 34x6	S 36x14	Own M	4-4½x5½	32.4	L	SP	Pha	Own	Str	G	Bos	L-N‡	P. Own	Own B	A	4	Spi	Own M	R	F	9.89	72.1	A	Own Y	Del	Ros	Hoo	Non	7400
Autocar M	120		S 34x6	S 36x14	Own M	4-4½x5½	32.4	L	SP	Pha	Own	Str	G	Bos	L-N‡	P. Own	Own B	A	4	Spi	Own M	R	F	9.89	72.1	A	Own Y	Del	Ros	Hoo	Non	7200
Available L5	....	190	S 36x6	S 40x12	Wau EU	4-5x6¼	40.0	L	FP	Wau	Chi	Str	G	Bos	Bos†	D. B-L	B-L 60	A	4	Spi	Tim 6760	W	F	11.3	60 6	A	Tim 1730	Tut	Ros	Smi	Non	9500
Biederman	....	180°	S 36x7	S 36x14	Con 6B	6-3¾x5	33.7	L	PC	Han	Own	Zen	G	Del	Del	D. B-L	B-L 60	U	7	Spi	Tim	W	F	11.5	60.6	A	Shu	Mat	Ros	Day	Non	9200
Brockway T	....	174	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 60	A	4	Spi	Tim 6760	W	F	10.33	.....	A	Tim 1732	She	Ros	Day	Non	9800
Brockway T15	....	176¾	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 60	A	7	Spi	Tim 6760	W	F	10.33	.....	A	Tim 1732	She	Ros	Day	Non	9800
Brockway TH	....	176	S 36x6	S 40x14	Wis H6	6-4x5	38.4	L	FP	Pha	Bus	Zen	V	Eis	L-N	D. B-L	B-L 60	A	7	Spi	Tim 6760	W	F	10.33	.....	A	Tim 1732	She	Ros	Day	Non	9800
Buck 84	....	183°	S 36x6‡	S 40x12‡	Con B5	4-4¾x6	36.1	L	PC	Pie	Own	Zen	V	Bos	Bos	D. B-L	B-L 60	A	7	Spi	Tim 6666	W	F	10.3	97.8	A	Tim 1632	Mat	Ros	Smi	Fir	7950
Buck 86	....	183°	S 36x6‡	S 40x12‡	Con 7T	6-4⅛x5¼	40.8	L	PC	Non	Own	Zen	V	Bos	Bos	D. B-L	B-L 60	A	7	Spi	Tim 6666	W	F	10 3	97.8	A	Tim 1632	Mat	Ros	Smi	Fir	8950
Chicago 50	....	183°	S 36x6	S 40x12	Her L	4-4½x5¾	32.4	L	PC	Pie	Chi	Zen	G	Apo	Non	D. B-L	B-L 60 Max	A	4	Pet	Tim 6760W	W	F	11.6	110 8	A	Tim 1732	Mat	Gem	Smi	Non	8500
Clinton 120L	....	204	S 36x6	DS36x7	Wau EU	4-5x6¼	40.0	L	PC	Wau	Own	Zen	G	Bos	Bos	D. B-L	B-L 60	A	4	Blo	Tim 6760	W	F	8.80	47.1	A	Tim 1732B	Per	Ros	StM	.....	9550
Clinton 120LM	....	204	S 36x6	DS36x7	Wau EU	4-5x6¼	40.0	L	PC	Wau	Own	Zen	G	Bos	Bos	D. B-L	B-L 60 Max	A	7	Blo	Tim 6760	W	F	8.80	83.6	A	Tim 1732B	Per	Ros	StM	.....	9650
Coleman 40	....	144	P 42x9	P 42x9	Bud YBU-I	4-4½x6	32.4	L	FP	.....	R-T	Str	V	Bos	Bos	D. Ful	Ful GU 14	U	8	Spi	Wi 120J-FF	R	F	8.57	139.	E	Wis 120J-F	Det	Ros	Day	Gdy	8750
Coleman 6-O	....	144	P 42x5	P 42x9	Bud BUS	6-4x5½	38.4	L	FP	.....	R-T	Str	V	Bos	Bos	D. Ful	Ful GU14	U	8	Spi	Wis 120JFF	R	F	8.6	137	E	Wis 120JF	Det	Ros	Day	Gdy	8750
Coleman 6-OX	....	144	P 42x9	P 42x9	Bud BUS	6-4x5½	38.4	L	FP	.....	R-T	Str	V	Bos	Bos	D. Ful	Ful GU14	U	8	Spi	Wis 120JFF	R	F	8.6	139	E	Wis 120JF	Det	Ros	Day	Gdy	9660
Coleman D-40	130		P 38x7	P 38x7	Bud HS	6-3¾x4½	27.3	L	FP	.....	R-T	Str	V	Bos	Bos	D. Ful	Ful GU14	U	8	Spi	Wis D101	R	F	7.0	139	E	Wis D107	Det	Ros	Day	Gdy	7200
Corbitt 70	....	178	S 36x6	DS40x6	Bud BTU	4-5x6½	40.0	L	FP	Sim	MeC	Str	V	Eis	Bos‡	D. B-L	B-L 60 Max	A	7	Spi	Tim 6760	W	F	11.6	110.8	A	Tim 1732B	She	Ros	Smi	Non	9410
Day-Elder L	....	170°	S 36x6	DS40x7	Bud BTU	4-5x6½	40.0	L	PC	Mon	Bus	Zen	V	Eis	Bos‡	D. B-L	B-L 60	A	4	Spi	Tim 6760	W	F	10.2	54.8	A	Tim 1732B	She	Gem	Van	Fir	10000
Denby 210	....	170	S 36x6	DS40x6	Con B5	4-4¾x6	36.1	L	PC	.....	Lon	Zen	V	Eis	.....	D. Ful	B-L 60	A	4	U-P	Cla	W	D	12.5	62.7	...	Tim	Det	Ros	Smi	.....	8560
Diamond T 82	....	180	S 36x6	S 40x6	Her G	4-4¾x5¾	36.1	L	FP	Mer	G&O	Zen	G	Bos	Opt‡	D. Ful	B-L 60	A	4	Spi	Tim 6760	W	F	11.66	62.38	A	Tim 1732B	Mat	Gem	Int	Non	9500
Diamond T 82	....	180	S 36x6	S 40x6	Her G	4-4¾x5¾	36.1	L	FP	Mer	G&O	Zen	G	Bos	Non	D. Ful	Ful HU1	A	8	Spi	Tim 6666	W	F	Opt.	Opt.	A	Tim 1632B	S.P	Ros	Smi	Non	8100
Diamond T 82	....	180	S 36x6	S 40x6	Her G	4-4¾x5¾	36.1	L	FP	Mer	G&O	Zen	G	Bos	Non	D. Ful	Ful HU1	A	8	Spi	Tim 6666	W	F	Opt.	Opt.	A	Tim 1632B	Mat	Gem	Day	Non	8700

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Key of abbreviations, page 43

Gasoline Tractor-Trucks

Trade Name and Model	Chassis Price	General: Standard Wheelbase (inches)	General: Tire Size: Front (inches)	General: Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Engine: Fuel System: Carburetor (Make)	Engine: Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Springs (Make)	Steering Gear (Make)	Wheels (Make)	Rims (Make)	Chassis Weight (lbs.) (stripped)
Acme 60 L		119½	S 36x4		Con L4	4-4½x5½	32 4 L	FP	Mon	G&O		Zen	V	Bos	Bos	P. B&B	Cot RU	U	4	Blo	Tim 65660D	W	F	8.50	42.0	A	Tim 1544-B	Det	Ros	Int	Non	5050
Acme 90-L		129	S 36x5	S 40x12	Con B7	4-5x6	40 1 L	FP	Mon	G&O		Ray	V	Bos	Bos	P. B&B	Cot SU	U	4	Blo	Tim 6666	W	F	8.75	45.5	A	Tim 1632-B	Det	Ros	Bim	Non	8160
Acme 125		129	S 36x6	S 40x14	Con B7	4-5x6	40 1 L	FP	Mon	G&O		Ray	V	Bos	Bos	P. B&B	Cot SU	U	4	Blo	Tim 6760	W	F	11.6	60.6	A	Tim 1732-B	Det	Ros	Smi	Non	8970
Amer. La France 5 Ton	3950	143⅞	S 36x4	S 36x7	Con 2R	4-4¼x6	28 9 L	PS	Own	Bus		Zen	V	Bos	Bos‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	7.57	40.8	B	Own 2R	Mer	....	Day	Non	6400
Amer. La France 7 Ton	4950	146⅞	S 36x5	S 36x10	Con 3R	4-4¾x6	28 9 L	PS	Own	Bus		Zen	V	Bos	Bos‡	D. Own	Own 3R	A	4	Own	Own 3R	W	F	8.75	47.6	B	Own 3R	Mer	....	Day	Non	8400
Amer. La France 10 Ton	5500	146½	S 36x6	DS40x6	Con 5R	4-4¾x6	36 1 L	PS	Own	Bus		Zen	V	Bos	Bos‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B	Own 5R	Mer	....	Day	Non	9400
Amer. La France 13 Ton	5750	146½	S 36x6	DS40x6	Con 5R	4-4¾x6	36 1 L	PS	Own	Bus		Zen	V	Bos	Bos‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B	Own 5R	Mer	....	Day	....	9500
Amer. La France 15 Ton	6000	146½	S 36x7	DS40x7	Con 5R	4-4¾x6	36 1 L	PS	Own	Bu-		Zen	V	Bos	Bos‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	11.67	63.5	B	Own 5R	Mer	....	Day	....	9700
Armleder 30	....	115	S 34x4	S 34x6	Her OX	4-4½	25 6 L	PC	Non	Own		Zen	V	Bos	Bos	D. B-L	B-L	U	4	Spi	Tim	W	F	7.25	39.0	A	Tim	She	Ros	Smi	Fir	4100
Armleder 50	....	116	S 36x4	S 36x8	Bud EBU-I	4-4½x5½	28 9 L	PC	Hin	Mer		Zen	V	Bos	Bos‡	D. B-L	B-L	U	4	Spi	Tim	W	F	9.25	49.5	A	Tim	She	Ros	Smi	Fir	5100
Diamond T T3T	....	119½	S 36x4	S 36x5	Her OX	4-4x5	25 6 L	PC	Mer	G&O		Str	V	Bos	Bos	D. Cov	Cov	U	3	Spi	Tim	W	F	8.20	29.9	A	Tim 1452	Mat	Ros	Gem	Non	....
Diamond TU4T	....	129¼	S 36x4	S 36x8	Her K	4-4¼x5¾	28 9 L	PC	Mer	G&O		Str	V	Bos	....	D. Cov	Cov RAD4	A	4	Spi	Tim 6566	W	F	8.80	44.3	A	Tim 1544B	Mat	Ros	Gem	Non	5940
Diamond T K2T	....	118⅞	S 36x5	DS36x5	Her L	4-4½x5¾	32 4 L	PC	Mer	G&O		Str	V	Bos	Non	D. Cov	Cov SA4	A	4	Spi	Tim 6666	W	F	11.6	56.4	A	Tim 1632B	Mat	Ros	Gem	Non	....
Diamond T S2T	....	140	S 36x6	DS36x6	Her G	4-4¾x5½	36 1 L	PC	Mer	G&O		Str	V	Bos	Non	D. Cov	B-L 60	A	4	Spi	Tim 6760	W	F	11.6	56.4	A	Tim 1732B	Mat	Ros	Gem	Non	....
Federal	3200	125	S 36x4	DS36x4	Con K4	4-4½x5½	27 2 L	FP	Pha	Own		Zen	V	Bos	Rem	P. B&B	B-L 60	A	4	Spi	Tim 6560	W	F	8.50	50.1	A	Own	Gem	Ros	Own	Non	5000
Federal	4235	121	S 36x5	S 36x5	Con L4	4-4½x5½	32 4 L	FP	Pha	Own		Zen	V	Bos	Rem	P. B&B	D-G	A	4	Spi	Tim 6666	W	F	8.75	59.8	A	Tim 1630B	....	....	Gem	Non	6700
F. W. D.	....	105	S 36x7	S 36x8	Wis A	4-4¾x5½	36 1 T	PC	Pie	MeC		Str	G	Eis	N-E‡	O. H-S	W-G	A	3	Spi	Own B	B	F	8.90	35.6	B	Own B	Tut	Ros	Std	Non	6150
Garford 50	....	130	S 36x5	S 36x8	Bud EBU-I	4-4¼x5½	28 9 L	PC	Sim	Own		Zen	G	Spl	A-L	D. Own	B-L 55 Max	A	7	Spi	Tim 65660D	W	F	8.5	80.75	A	Tim 1532B	Per	Ros	Day	....	5950
Garford 80	....	132	S 36x5	S 36x12	Bud BTU	4-5x6½	40 0 L	PC	K-P	Own		Zen	G	Spl	A-L	D. Own	B-L 60 Max	A	7	B.G.	Tim 9666	W	F	8.75	83.1	A	Tim 1632B	Per	Ros	Bet	....	8700
Garford 100	....	132	S 36x5	S 40x14	Bud B1U	4-5x6½	40 0 L	PC	K-P	Own		Zen	G	Spl	A-L	D. Own	B-L 60 Max	A	7	B.G.	Tim 6760	W	F	10.25	97.38	A	Tim 1632B	Per	Ros	Bet	....	9450
G.M.C. K-52T	....	127	S 36x4	S 36x8	Own K-41	4-4x5½	25 6 L	FP	Own	MeC		Mar	G	Eis	Rem	D. Own	Own K41	U	7	Own	Tim 6560	W	F	8.50	57.5	A	Tim 1542B	Det	Ros	Day	Non	5520
G.M.C. K-72T	....	138	S 36x5	S 36x12	Own K-71	4-4½x6	32 4 L	FP	Own	MeC		Mar	G	Eis	Rem	D. Own	Own K71	A	7	Own	Tim 6666	W	F	8.75	75.4	A	Tim 1632B	Det	Ros	Day	Non	8120
G.M.C. K-102T	....	138	S 36x5	S 36x14	Own K-101	4-4½x6	32 4 L	FP	Own	MeC		Mar	G	Eis	Rem	D. Own	Own K101	A	7	Own	Tim 6760	W	F	10.00	86.2	A	Tim 1632B	Det	Ros	Day	Non	8880
G.M.C. K-10T	....	111¼	S 36x5	S 36x12	Own K-102	4-4½x6½	32 4 L	FP	Own	MeC		Mar	G	Eis	Rem	D. Own	Own	U	7	Own	Tim 6760W	W	F	10.33	....	A	Tim	....	....	....	....	7677
G.M.C. K-15T	....	111¼	S 36x5	S 36x14	Own K-102	4-4½x6½	32 4 L	FP	Own	MeC		Mar	G	Eis	Rem	D. Own	Own	U	7	Own	Tim 6760	W	F	10.66	....	A	Tim	....	....	....	....	8477
Harvey WTT	3500	125	S 36x5	S 36x10	Bud EBU-I	4-4½x5½	28 9 L	PC	....	Own		Str	G	Eis	Non	D. B-L	B-L 55	A	4	Spi	Tim 65660D	W	F	6.25	87.9	A	Tim 1544B	Bea	Ros	Smi	Non	6750
Harvey WHT	4250	125	S 36x5	S 36x12	Bud YBU-I	4-4½x6	32 4 L	SP	....	Own		Str	G	Eis	Opt	D. Ful	B-L 60	A	4	Spi	She W-52	I	D	10.25	54.8	A	She 4FA20	Bea	Ros	Smi	Non	8900
Int. Harvester 43	....	115	S 36x4	S 36x7	Own 43	4-3¼x5	22 5 H	SP	Own	Own	RBo	Own	G	RBo	Opt	D. Own	Own	U	4	Own	Own 43	I	D	9.00	53.1	B	Own 43	....	Own	Own	....	4760
Int. Harvester 63	....	120	S 36x5	S 36x8	Own 63	4-4¼x5	28 9 H	SP	Own	Own	RBo	Own	G	RBo	Opt	D. Own	Own	U	4	Own	Own 63	I	D	9.00	53.1	B	Own 63	....	Own	Own	....	5600
Int. Harvester 103	....	134	S 36x5	S 40x14	Own 103	4-4¼x5	28 9 H	SP	Own	Own	RBo	Own	G	RBo	Opt	D. Own	Own	U	4	Own	Own 103	I	D	11.00	69.9	B	Own 103	....	Own	Own	....	7435
Kelly-Springfield K-70	2900	120	S 36x4	S 36x7	Con K4	4-4½x5¼	27.2 L	FP	Pie	Own		Zen	G	Eis	Opt	P. B&B	B-L 55	A	4	Spi	Own K70	W	F	9.25	49.5	A	Own K70	Mat	Ros	S&M	Non	5387
Kelly-Springfield K-75	3600	124	S 36x5	S 36x10	Con L5	4-4¼x5½	28 9 L	FP	Pie	Own		Zen	G	Eis	Opt	P. B&B	B-L 55	A	4	Pet	Cla 2H	I	D	9.00	48.1	D	Own K75	Mat	Ros	Cla	Non	6300
Kelly-Springfield K-76	3600	124	S 36x5	S 36x10	Con L5	4-4¼x5½	28 9 L	FP	Pie	Own		Zen	G	Eis	Opt	P. B&B	B-L 55	A	4	Pet	Own K76	W	F	11.6	62.0	A	Own K76	Mat	Ros	S&M	Non	6400
Kelly-Springfield K-41	4400	126	S 36x5	S 36x12	Own K41	4-4¼x6½	32 4 T	PC	Pie	Lon		Zen	G	Eis	Opt	P. B&B	B-L 60	A	4	Pet	Cla 3H	I	D	11.6	62.0	D	Own K41	Per	Jen	Jen	Non	7740
Kelly-Springfield K-42	3900	126	S 36x5	S 40x5	Own K42	4-4¼x6½	32 4 T	PC	Pie	Lon		Zen	G	Eis	Opt	P. B&B	B-L 60	A	4	Pet	Std 607-5	W	F	10.2	54.8	A	Own K-42	Per	Jen	Jen	Non	8100
Kelly-Springfield K-61	5000	126	S 36x6	DS36x7	Own K61	4-4¼x6½	32 4 T	PC	Pie	Lon		Zen	G	Eis	Opt	P. B&B	B-L 60	A	4	Pet	Cla 5H	I	D	11.6	62.0	D	Own K-61	Per	Jen	Jen	Non	9020
Kelly-Springfield K-100	5000	143	S 36x6	E 40x14	Own AB	4-4¼x5	28 9 H	SP	Pie	Lon		Zen	G	Eis	Opt	P. B&B	B-L 60 Max	A	4	Pet	Own	C	D	13 41	127.0	A	Own AB	Per	Jen	Jen	Non	9400
Mack AB 5-Ton	....	122½	S 36x4	DS36x4	Own AB	4-4¼x5	28 9 L	PS	Own	Own		Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	10.5*	51.1*	B	Own AB	Mer	Own	Own	....	....
Mack AC 7-Ton	....	128	S 34x5	DS36x5	Own AC	4-5x6	40 0 L	PS	Own	Own		Str	G	Spl	N-E‡	P. Own	Own AC	U	4	Spi	Own AC	C	D	9.06*	58.0*	D	Own AC	Mer	Own	Own	....	....
Mack AC 10-Ton	....	128	S 34x6	DS36x6	Own AC	4-5x6	40 0 L	PS	Own	Own		Str	G	Spl	N-E‡	P. Own	Own AC	U	4	Spi	Own AC	C	D	9.69*	62.24*	D	Own AC	Mer	Own	Own	....	....
Mack AC 13-Ton	....	128	S 34x6	DS36x6	Own AC	4-5x6	40 0 L	PS	Own	Own		Str	G	Spl	N-E‡	P. Own	Own AC	U	4	Spi	Own AC	C	D	10.5*	67.44*	D	Own AC	Mer	Own	Own	....	....
Mack AC 15-Ton	....	128	S 34x7	DS36x7	Own AC	4-5x6	40 0 L	PS	Own	Own		Str	G	Spl	N-E‡	P. Own	Own AC	U	4	Spi	Own AC	C	D	11.5*	73.5*	D	Own AC	Mer	Own	Own	....	....
Pierce-Arrow XB	3750	133	S 36x5	S 36x6	Own XB	4-4x5½	25 6 T	FP	Own	Own		Str	P	Del	Del	D. Own	Own XB	A	4	Spi	Own XB	W	F	7.25	50.2	A	Own XB	S.P	Own	Own	Non	6280
Pierce-Arrow RD	5400	133	S 36x6	S 36x12	Own RD	4-4½x6¾	32 4 T	FP	Own	Own		Str	P	Del	Del	D. Own	Own RD	A	4	Spi	Own RD	W	F	9.25	64.1	A	Own RD	S.P	Own	Own	Non	8490
Pierce-Arrow RF	5600	118	S 36x6	S 36x7	Own RF	4-4½x6¾	32 4 T	FP	Own	Own		Str	P	Del	Del	D. Own	Own RF	A	4	Spi	Own RF	W	F	10.0	51.9	B	Own RF	S.P	Own	Own	Non	9540
Saurer	6000	Opt	S 40x6	S 40x8	Wis RCU	4-4½x6	32 4 L	PC	Pie	Own		Zen	G	Spl	Opt	D. B-L	Own 5	A	8	Spi	Own	R	F	7.87	50.	B	Own	She	Own	Own	....	7500
Schacht 5 Ton	3600	129½	S 36x4	S 36x8	Wis RCU	4-4½x6	32 4 L	PC	Pie	Own		Zen	G	Spl	Non	D. B-L	Own 7	A	8	Spi	....	R	F	8.5	40.4	B	Own	She	Own	Own	....	6400
Schacht 7 Ton	4000	129½	S 36x5	S 36x10	Wis RCU	4-4½x6	32 4 L	PC	Pie	Own		Zen	G	Spl	Non	D. B-L	Own 10	A	8	Spi	....	R	F	10 4	49.4	B	Own	She	Own	Own	Non	7500
Schacht 10 Ton	4400	131½	S 36x6	S 40x12	Wis RCU	4-4½x6	32 4 L	PC	Pie	Own		Zen	G	Spl	Non	D. B-L	Own 10	A	8	Spi	....	W	F	14 0	66.5	B	Own	She	Own	Own	Non	8200
Schacht 13 Ton	4800	131½	S 36x6	S 40x12	Wis RCU	4-4½x6	32 4 L	PC	Pie	Own		Zen	G	Spl	Non	D. B-L	Own 13	A	8	Spi	....	W	F	14 0	66.5	B	Own	She	Own	Own	Non	8400
Schacht 15 Ton	5100	131½	S 36x7	S 40x14	Wis RBU	4-5x6	40 0 L	PC	Pie	Own		Zen	G	Spl	Non	D. B-L	Own 15	A	8	Spi	....	W	F	14 0	66.5	B	Own	She	Own	Own	Non	9000
Service 61	....	127¾	S 36x4	S 36x8	Bud EBU-I	4-4½x5½	28 9 L	PC	Non	....	....	Str	V	Eis	Rem	P. B&B	B-L 51	A	4	Spi	Tim 6566	W	F	7.75	41.5	A	Tim 1544B	She	Ros	Int	....	5785
Service 81	....	131⅞	S 36x5	S 36x10	Bud YBU-I	4-4½x6	32 4 L	PC	Non	....	....	Str	V	Eis	Rem	P. B&B	B-L 60	A	4	Spi	Tim 6666	W	F	8.50	41.7	A	Tim 1632B	She	Ros	Int	....	7900
Service 103	....	131⅞	S 36x6	S 40x12	Bud YBU-I	4-4½x6	32 4 L	PC	Non	....	....	Str	V	Eis	Rem	P. B&B	B-L 60	A	7	Spi	Tim 6760	W	F	10.25	97.3	A	Tim 1732B	She	Ros	Int	....	9150
Sterling DW10T-5	148	....	S 36x4	S 36x4	Own CU	4-3⅝x5¾	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	B-L 51	A	4	Spi	Tim	W	F	7.25	38.8	A	Tim	Mat	Ros	Hoo	....	4080
Sterling EW15T-7½	148	....	S 36x5	S 40x10	Own DU	4-4½x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	B-L 60	A	4	Spi	Tim	W	F	8.7	51.8	A	Tim	Mat	Ros	Hoo	....	7775
Sterling EW20T-10	148	....	S 36x6	S 40x12	Own DU	4-4½x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	B-L 60	A	4	Spi	Tim	W	F	8.8	52.4	A	Tim	Mat	Ros	Hoo	....	8675
Sterling EW24T-12	148	....	S 36x6	S 40x12	Own EU	4-5x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	B-L 60	A	4	Spi	Tim	W	F	8.8	52.4	A	Tim	Mat	Ros	Hoo	....	9175
Sterling EC20T-10	....	....	S 36x6	S 40x12	Own DU	4-4½x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	Own	A	6	B.G.	Own	C	D	8.7	52.7	A	Tim	Mat	Ros	Hoo	....	8100
Sterling EC824T-12	148	....	S 36x6	S 40x12	Own EU	4-5x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	Own	A	6	B.G.	Own	C	D	8.7	52.7	A	Tim	Mat	Ros	Hoo	....	8400
Sterling EC28T-14	148	....	S 36x6	S 40x12	Own EU	4-5x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	Own	A	6	B.G.	Own	C	D	8.7	52.7	A	Tim	Mat	Ros	Hoo	....	8800
Sterling EC32T-16	148	....	S 36x7	S 40x14	Own GU	4-5⅜x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	Own	A	6	B.G.	Own	C	D	8.7	52.7	A	Tim	Mat	Ros	Day	....	9825
Sterling EC50T-25	148	....	S 36x8	S 40x14	Own GU	4-5⅜x6¼	....	L	PC	Wau	Own	Zen	V	Eis	....	O. H-S	Own	A	6	B.G.	Own	C	D	9.8	59.5	A	Tim	Mat	Ros	Day	....	10250
Walter FL 7 Ton	....	Opt	S 40x6	S 40x8	Own FY	4-4x5¾	25.6 L	PC	Own	Own		Str	V	Wes	....	N-E	....	U	5	Own	Own FE	W	F	8.50	85.0	A	Own FE	....	....	Non	Non	7700
Walter F 10 Ton	....	....	S 40x7	S 40x8	Own DU	4-4½x6¼	32 4 L	PC	Own	Own		Zen	V	Wes	....	P. M-E	Own F	U	5	Own	Own F	W	F	8.50	85.0	A	Own F	....	Ros	Non	Non	8500
Walter FR 15 Ton	....	Opt	S 40x8	S 40x8	Own DY	4-4½x6¾	32 4 L	PC	Own	Own		Zen	V	Wes	....	N-E	Own	U	5	Own	Own FR	W	F	8.50	85.0	A	Own FR	....	Ros	Day	Non	9200

KEY OF ABBREVIATIONS

Wheelbase:

*—More than one wheelbase furnished.

Tires:

B—Balloon.
P—Pneumatics standard equipment.
S—Solids.
DP—Dual pneumatics standard equipment.
DS—Dual solids.
‡ This sign after tire size indicates that pneumatics can be furnished at extra cost.

Engine:

Bud—Buda Co., Harvey, Ill.
Con—Continental M. Corp., Detroit, Mich.
D—Head and Side.
FP—Full Pressure to all bearings including wrist pins.
H—Overhead.
HaS—Hall-Scott Motor Car Co., Berkeley, Cal.
Her—Hercules Motors Corp., Canton, Ohio.
Himico—Hinkley Motors, Inc., Detroit, Mich.
Hin—Hinkley Motors, Inc., Detroit, Mich.
I—In Head.
Jackson—Master Motor Truck Mfg. Co., Chicago, Ill.
Kni—Yellow Sleeve Valve Eng. Works, East Moline, Ill.
L—L-Head.
Lyc—Lycoming M. Corp., Williamsport, Pa.
Overland—Willys-Overland Co., Toledo, O.
PC—Pressure to all crankshaft and connecting-rod bearings.
PS—Pressure with splash.
SP—Circulating splash.
T—T-Head.
Wau—Waukesha M. Co., Waukesha, Wis.
Wis—Wisconsin M. Mfg. Co., Milwaukee, Wis.
Yell—Yellow Sleeve V. E. Works, E. Moline, Ill.
X—Sleeve.

Governor:

Con—Continental M. Corp., Detroit, Mich.
Dup—Eisemann Magneto Corp., New York.
Han—Handy Gov. Co., Detroit, Mich.
Hin—Hinkley Motors, Inc., Detroit, Mich.
K. P.—K. P. Products Co., New York, N. Y.
McK—E. R. Klemm, Chicago, Ill.
Mon—Monarch Gov. Co., Detroit, Mich.
Non—Not Supplied.
Pha—Pharo Mfg. Co., Bethlehem, Pa.
Pie—Pierce Governor Co., Anderson, Ind.
Sim—Eisemann Magneto Corp., New York.
Tac—Tractor Appliance Co., New Holstein, Wis.
Wau—Waukesha M. Co., Waukesha, Wis.

Radiator:

Bus—Bush Mfg. Co., Hartford, Conn.
Chi—Chicago Mfg. Co., Chicago, Ill.
E-M—English & Mersick Co., New Haven, Conn.
Fed—Fedders Mfg. Co., Buffalo, N. Y.
Fle—Flexo Mfg. Co., Los Angeles, Cal.
G&O—G. & O. Mfg. Co., New Haven, Conn.
Har—Harrison Rad. Corp., Lockport, N. Y.
Idl—Ideal Sheet Metal Works, Chicago, Ill.
Liv—Livingston Rad. Corp., Plainfield, N. J.
Lon—Long Mfg. Co., Detroit, Mich.
McC—McCord Rad. & Mfg. Co., Detroit, Mich.
McK—McKinnon Dash Co., Buffalo, N. Y.
Mod—Modine Mfg. Co., Racine, Wis.
Per—Racine Radiator Co., Racine, Wis.
R-T—Rome-Turney Rad. Co., Rome, N. Y.
Spa — Sparks-Withington Co., Jackson, Mich.
Stn—Standard Radiator Co., Inc., Springville, N. Y.
U. S.—U. S. Cartridge Co., Lowell, Mass.

Full System:

B.B.—Penberthy Injector Co., Detroit, Mich.
Car—Carter Carburetor Co., St. Louis, Mo.
Ens—Ensign Car. Co., Los Angeles, Cal.
G—Gravity.
Hol—Holley Carburetor Co., Detroit, Mich.
Joh—Johnson Co., Detroit, Mich.
Mar—Marvel Carburetor Co., Flint, Mich.
P—Pressure.
Ray—Beneke Mfg. Co., Chicago, Ill.
Sch—Wheeler Schebler Carburetor Co., Indianapolis, Ind.
Ste—Detroit Lubricator Co., Detroit, Mich.
Str—Stromberg Motor Devices Co., Chicago, Ill.
Til—Tillotson Mfg. Co., Toledo, Ohio.
V—Vacuum.
Zen—Zenith-Detroit Corp., Detroit, Mich.

Electrical Systems:

‡—Generator & Starter at Extra Cost.
†—Starter not supplied, Generator at Extra Cost.
*—Starter at Extra Cost.
A-L—Electric Auto-Lite Corp., Toledo, O.
Alc—Cincinnati S. B. Co., Cincinnati, O.
Apo—Apolo Magneto Corp., Kingston, N. Y.
Bij—Bijur Motor Appliance Co., Hoboken, N. J.
Bos—American Bosch Magneto Co., Springfield, Mass.
Con—Connecticut Telephone & Electric Co., Meriden, Conn.
Del—Dayton Engin. Lab. Co., Dayton, Ohio.
DJ—DeJohn Elec. Corp., Toledo, Ohio.
Dyn—Owen Dyneto Corp., Syracuse, N. Y.
Eis—Eisemann Magneto Corp., New York.
Exi—Electric S. B. Co., Phila., Pa.
G&D—Gray & Davis, Boston, Mass.
Gou—Gould S. B. Co., New York.
Hob—Hobbs Battery Co., Los Angeles, Cal.
L-N—Leece-Neville Co., Cleveland, Ohio.
N-E—North East Elect. Co., Rochester, N. Y.
Non—Not Supplied.
Pol—Prest-O-Lite Co., Indianapolis, Ind.
Rem—Remy Electric Co., Anderson, Ind.
RBo—Robert Bosch Magneto Co., New York, N. Y.
Sci—Scintilla Magneto Co., Sidney, N. Y.
Sim—Simms Magneto Co., E. Orange, N. J.
USL—U. S. Light & Heat Corp., Niagara Falls, N. Y.
Ves—Vesta Battery Corp., Chicago, Ill.
Wes—Westinghouse Elec. & Mfg. Co., Springfield, Mass.
Wil—Willard S. B. Co., Cleveland, Ohio.

Clutch and Gearset:

*—Other ratios optional.
A—Amidships.
B & B—Borg & Beck Co., Chicago, Ill.
B-L—Brown-Lipe Gear Co., Syracuse, N. Y.
Cot—Cotta Trans. Corp., Rockford, Ill.
Cov—Covert Gear Co., Lockport, N. Y.
Det—A. J. Detlaff Co., Detroit, Mich.
D-G—Detroit Gear & Machine Co., Detroit, Mich.
Dod—Dodge Brothers Co., Detroit, Mich.
D—Disk.
Dur—Durston Gear Corp., Syracuse, N. Y.
Ful—Fuller & Sons Mfg. Co., Kalamazoo, Mich.
H-S—Hele-Shaw, Merchant & Evans Co., Philadelphia, Pa.
Hoo—Hoosier Clutch Co., Muncie, Ind.
J—Unit with Jackshaft.
K—Cone.
Lon—Long Mfg. Co., Detroit, Mich.
M-E—Merchant & Evans Co., Phila., Pa.
M. M.—Mechanics Mach. Co., Rockford, Ill.
Mun—Muncie Gear Works, Muncie, Ind.
O—Disk in Oil.
P—Plate.
R—Rear Axle.
Roc—Rockford Grinding Co.
S—Separate Unit.
U—Unit with Engine.
W-G—Warner Gear Co., Muncie, Ind.

Universal:

B.G.—Universal Machine Co., Bowling Green, Ohio.
Blo—Blood-Bros. Mach. Co., Allegan, Mich.
Det—Universal Products Co., Detroit, Mich.
Har—Spicer Mfg. Co., S. Plainfield, N. J.
M-E—Merchant & Evans Co., Phila., Pa.
M. M.—Mechanics Machine Co., Rockford, Ill.
Pet—Cleveland Universal Parts Co., Cleveland, Ohio.
Pic—Carl Pick Co., West Bend, Wis.
Sne—Spicer Mfg. Corp., S. Plainfield, N. J.
Spi—Spicer Mfg. Co., S. Plainfield, N. J.
The—Thermoid Rubber Co., Trenton, N. J.
Thei—Almetal Universal Joint Co., Cleveland, Ohio.
U-M—Universal Machine Co., Bowling Green, Ohio.
U-P—Universal Products Co., Detroit, Mich.

Front and Rear Axles:

½—Semi-Floating.
¾—Three-Quarter Floating.
B—Straight Bevel.
Cla—Clark Equip. Co., Buchanan, Mich.
Col—Columbia Axle Co., Cleveland, Ohio.
Con—Continental Axle Co., Edgerton, Wis.
C—Chain.
D—Dead.
Eat—Eaton Axle Co., Cleveland, Ohio.
F—Floating.
I—Internal Gear.
P—Spur Gear.
R—Double Reduction.
Rus—Russel Motor Axle Co., Detroit, Mich.
S—Spiral Bevel.
Sal—Salisbury Axle Co., Jamestown, N. Y.
She—Sheldon Axle & Spring Co., Wilkes-Barre, Pa.
Shu—Shuler Axle Co., Inc., Louisville, Ky.
Std—Standard Parts Co., Cleveland, Ohio.
Tim—Timken Det. Axle Co., Detroit, Mich.
Tor—Eaton Axle & Spring Co., Cleveland, Ohio.
Vul—Vulcan Motor Axle Co.
Wal—Walker Axle Co., Chicago, Ill.
W—Worm.
Wis—Wisconsin Parts Co., Oshkosh, Wis.

Brake:

A—Rear Wheels only.
B—Drive Shaft and Rear Wheels.
C—6 Wheel Brakes.
D—Jackshaft and Rear Wheels.
E—4 Wheel Brakes.

Springs:

Amc—American Autoparts Co., Detroit, Mich.
Arm—General Motors Co., Pontiac, Mich.
Bea—Beans Spring Co., Inc., Massillon, O.
Bet—Betts Bros. Sp. Co., Inc., San Francisco, Cal.
Cha—Champion Auto Sp. Co., St. Louis, Mo.
Del—D. Delany & Son, Newark, N. J.
Det—Detroit Steel Prod. Co., Detroit, Mich.
G-C—Garden City Sp. Works, Chicago, Ill.
Har—Harvey Sp. & Forging Co., Racine, Wis.
I. C.—Iron City Sp. Co., Pittsburgh, Pa.
Lah—Laher Auto Spring Co., Portland, Ore.
Mar—Maremont Mfg. Co., Chicago, Ill.
Mat—Mather Spring Co., Toledo, Ohio.
Mer—E. R. Merrill Spring Co., New York.
Pen—Penn Sp. Works, Baldwinsville, N. Y.
Per—Eaton Blum. & Sp. Co., Cleveland, O.
Row—William & Harvey Rowland, Phila., Pa.
She—Sheldon Axle & Sp. Co., Wilkes-Barre, Pa.
S. P.—Spring Perch Co., Stratford, Conn.
S. S.—Standard Steel Sp. Co., Corapolis, Pa.
Tem—Temme Spring Corp., Chicago, Ill.
Tut—Tuthill Sp. Co., Chicago, Ill.
U. S.—United States Sp. Co., Los Angeles, Cal.

Steering Gear:

CAS—C. A. S. Products Co., Columbus, O.
D-G—Detroit Gear & Machine Co., Detroit, Mich.
Dod—Dodge Bros. Co., Detroit, Mich.
Gem—Gemmer Mfg. Co., Detroit, Mich.
Han—Hannum Mfg. Co., Milwaukee, Wis.
Jac—Saginaw Products Co., Saginaw, Mich.
Lav—Hannum Mfg. Co., Milwaukee, Wis.
Ros—Ross Gear & Tool Co., Lafayette, Ind.
Woh—Wohlrab Gear Co., Racine, Wis.

Wheels:

Arc—Archibald Wheel Co., Lawrence, Mass.
A-W—Auto Wheel Co., Lansing, Mich.
Bet—Bethlehem Steel Co., Bethlehem, Pa.
Bim—Bimel Spoke & Auto Wheel Co., Portland, Ind.
Bud—Budd Wheel Co., Phila., Pa.
Cla—Clark Equip. Co., Buchanan, Mich.
Day—Dayton Automotive Wheel Co., Dayton, Ohio.
Dis—Motor Wheel Corp., Lansing, Mich.
Hay—Hayes Wheel Co., Jackson, Mich.
Hoo—Hoopes, Bro. & Darlington, Inc., West Chester, Pa.
Ind—Indestructible Wheel Co., Lebanon, Ind.
Int—Interstate Foundry Co., Chicago, Ill.
Jon—Phineas, Jones & Co., Hillside, N. J.
Kel—Kelsey Wheel Co., Detroit, Mich.
M-M—Michigan Malleable Iron Co., Detroit.
Mot—Motor Wheel Corp., Lansing, Mich.
Mun—Muncie Wheel Co., Muncie, Ind.
Nor—Northern Wheel Corp., Alma, Mich.
Pru—Prudden Wheel Co., Lansing, Mich.
Roy—Royer Wheel Co., Aurora, Ind.
Sch—St. Marys Wheel & Spoke Co., St. Marys, Ohio.
Smi—Smith Wheel, Inc., Syracuse, N. Y.
StM—St. Marys Wheel Co., St. Marys, O.
Std—Standard Wheel Co., Terre Haute, Ind.
Van—Van Wheel Corp., Oneida, N. Y.
Way—Wayne Wheel Co., Newark, N. Y.

Rim Equipment:

Cle—Cleveland Welding & Mfg. Co. of the Hydraulic Steel Co., Cleveland, Ohio.
Fir—Firestone Steel Prod. Co., Akron, O.
Gdy—Goodwear Tire & Rub. Co., Akron, O.
Hay—Hayes Wheel Co., Jackson, Mich.
Jax—Jaxon Steel Prod. Co., Jackson, Mich.
Kel—Kelsey Wheel Co., Detroit, Mich.
Non—None Supplied.

Motor Bus Chassis Specifications

For Other Chassis Which Are Recommended and Adaptable for Bus Use, See Models Having Sign (§) in the "COMMERCIAL CAR SPECIFICATIONS"

Key of abbreviations, page 43

MAKE AND MODEL	GENERAL					ENGINE				ELECTRICAL SYSTEM				Normal Speed		TRANSMISSION				REAR AXLE			FRONT AXLE		TIRES AND WHEELS				DIMENSIONS (In.)		
		WEIGHT										Battery				CLUTCH	GEARSET								TIRES (In.)				Overall	
	Seating Capacity	Chassis Only	Chassis with Body	Recommended Body Allowance	Wheelbase	Make and Model	Number of Cylinders, Bore and Stroke	Radiator Make	Carburetor Make	Ignition System Make	Generator and Starter Make	Make	Voltage and Amp. Hr. Cap.	High M. P. H.	Low M. P. H.	Type and Make	Make and Model	Number of Forward Speeds	Universal Make	Make and Model	Final Drive	Brake Location	Make and Model	Steering Gear Make	Front	Rear	Wheels—Make	Turning Radius (Ft.)	Floor Height	Length	Width
Ace C	30	6500	11500	5000	204	Con 7T	6-4½x5¼	Own	Zen	Eis	RBo	USL	12-110	35	6.0	D. B-L	B-L 55	4	Pet	Tim 6516	W	A	Tim 1550	Ros	P 36x6	DP 36x6	Bud	34	27½	316	90
Acme 116	18	4910	8460	....	180	Con 6B	6-3¾x5	Per	Zen	Eis	Bos	Wil	6-153	40	.....	D. B-L	B-L 51	4	Blo	Cla B6000	B	A	Shu	Ros	P 32x6	DP 32x6	Mot	.....	21¾	259	83¾
Acme 121	22	5110	9280	....	205	Con 7T	6-4½x5¼	Per	Str	Eis	Bos	Wil	6-153	45	.....	D. B-L	B-L 55	4	Blo	Cla B720	B	A	Shu	Ros	P 32x6	DP 32x6	Mot	.....	21¾	276	83¾
American-LaFrance4R	25	8700	.....	....	196	Own 4R	4-4¾x6	Own	Zen	Bos	N-E	Wil	12-140	27	6.0	D Own	Own	4	Spi	Own 4R	R	B	Own 4R	Own	P 34x7	DP 34x7	Bud	33	27	298	89¾
American-LaFrance4R	29	9100	.....	....	226	Own 4R	4-4¾x6	Own	Zen	Bos	N-E	Wil	12-140	27	6.0	D Own	Own	4	S,i	Own 4R	R	B	Own 4R	Own	P 34x7	DP 24x7	Bud	37½	27	328	89¾
Brockway EB	18	3850	6350	2500	153	Wis SU	4-4x5	G&O	Zen	Eis	L-N	Exi	12-220	42	10.0	D. B-L	B-L 30	3	Spi	Col 53000	B	A	Col 5200	Gem	P 32x6	P 34x7	Van	28	28½	243	64
Brockway EB4	18	4000	6400	2500	153	Wis 6Y	6-3⅜x5	G&O	Zen	Eis	L-N	Exi	12-220	45	11.0	D. B-L	B-L 30	3	Spi	Col 53000	B	A	Col 5200	Gem	S 30x5	DS 30x5	Bud	28	28½	243	64
Brockway H	22	4975	7975	3000	164	Con 6B	6-3¾x5	G&O	Zen	Eis	L-N	Exi	12-220	45	8.5	D. B-L	B-L 55	4	Spi	Wis 6730	B	....	Shu 5550	Ros	P 32x6	DP 32x6	Bud	30	26½	256	74
Brockway J	25	6585	10585	4000	185	Con 6B	6-3¾x5	G&O	Zen	Eis	L-N	Exi	12-220	35	6.5	D. B-L	B-L 55	4	Spi	Tim 6516	I	....	Shu 610B	Ros	P 36x6	DP 36x6	Bud	32	27½	295¼	90
Brockway JI	29	7200	11000	5000	221	Wis H	6-4x5	G&O	Zen	Eis	L-N	Exi	12-220	40	6.5	D. B-L	B-L 55	4	Spi	Tim 6522	I	A	She D445	Ros	S 34x7	DS 34x7	Bud	32	26	344¾	90
Clinton 65B	30	5925	8700	2725	184	Wau CU	4-4⅜x5¾	Own	Zen	Bos	Bos	Pol	6-180	30	3.0	D. B-L	B-L 55	4	Blo	Tim 6566	W	A	Tim 1544B	Ros	P 36x6	DP 36x6	Bud	37	30	270	75½
Clinton 65BS	35	6600	9600	3000	220	Wau DU	4-4½x6¼	Own	Zen	Bos	Bos	Pol	6-180	35	3.0	D. B-L	B-L 55	4	Blo	Tim 6516	W	A	Tim 1550	Ros	P 36x6	DP 36x6	Bud	40	26	286	90
Commerce 60	25	.....	.....	3000	229	Con 6B	6-3¾x5	Lon	Zen	Bos	Bos	Wil	6-153	35	6.0	D. B-L	B-L 60H	4	Blo	Tim 6516	W	A	Tim 1550	Ros	P 36x6	DP 36x6	Bud	.....	20½	330	90
Commerce 65	29	8220	.....	3500	242	Con 14H	6-4½x5¾	Fed	Zen	Bos	L-N	Wil	12-153	35	5.0	D. B-L	B-L 60H	4	Blo	Tim 6516	W	A	Tim 1550	Ros	P 36x6	DP 36x6	Bud	....	20½	343	90
Concord	25	.....	.....	....	196	Bud Bus	6-4x5½	Own	Zen	Bos	L-N	Exi	12-240	42	6.5	D. B-L	B-L 51	4	Spi	Tim 6570S	W	A	Shu 5550B	Ros	P 36x6	DP 36x6	Bud	.....	28	.....	....
Corbitt BRT	18	.....	5630	3000	184	Con 7T	6-4½x5¼	Per	Zen	L-N	L-N	Pol	12-220	40	5.0	D. B-L	B-L 51	4	Spi	Cla 720	B	A	.....	Ros	P 32x6	DP32x6	Bud	32	26½	.....	90
Day-Elder 20	...	5200	7700	2500	168	Bud KBU	4-4x5¼	Bus	Zen	Eis	Bos	Wil	6-153	35	10.0	D. B-L	B-L 35	4	Spi	Tim 6462	W	A	Tim 1526	Gem	P 36x6	P 38x7	Van	30	32	246½	70½
Day-Elder 25	...	5600	8600	3000	180	Con 6B	6-3¾x5	Bus	Zen	Eis	Bos	Wil	6-153	35	7.0	D. B-L	B-L 51	4	Spi	Tim 6566	W	A	Tim 1544	Gem	P 36x6	P 40x8	Bud	30	32	260	75½
Day-Elder 30	...	7000	11000	4000	196	Bud Bus	6-4x5⅜	Bus	Zen	Eis	L-N	Wil	6-153	35	7.0	D. B-L	B-L 51	4	Spi	Huck 85	R	A	She D445	Gem.	P 36x6	P 36x6	Bud	27	25	293	90
Denby 36	30	7000	10500	3500	216	Con 6B	6-3¾x5	Lon	Zen	RBo	RBo	Wil	12-153	30	.....	D. Ful	Ful GU14	4	Blo	Cla 3D	I	A	Shu 610B	Ros	P 36x6	DP 36x6	Bud	34	21	294	91
Dorris M4 Parlor Car	18	4200	7700	3500	176	Own	4-4¼x5½	Mod	Str	Bos	Bos	Wil	6-130	40	5.0	D. B-L	B-L 51	4	Spi	Wis DR	B	A	Tim	Ros	P 32x6	DP 32x6	Bud	32	23½	264	84
Dorris L6 Parlor Car	25	6475	11000	....	224	Own	6-4x5	Mod	Str	Bos	N-E	Wil	12-153	45	5.0	D. B-L	B-L 55	4	Spi	Wis DR	R	A	Tim 1560	Ros	P 36x6	DP 36x6	Bud	36	24	309	90
Dorris L6 (gas elec.)	29	7875	12875	4500	224	Own	6-4x5	Mod	Str	Bos	N-E	Wil	12-130	45	5.0	Non	Non	....	Spi	Wis DR	R	A	Tim 1560	Ros	S 34x7	DS 34x7	Bud	36	23	309	92
Fageol Parlor Car	22	6770	10550	....	230	HaS 75	6-4¼x5½	Lon	Zen	Del	Del	USL	12-118	35	7.0	D. B-L	B-L 55	4	Spi	Tim 65190	W	A	Tim 1550	Ros	P 36x6	DP 36x6	Bud	38½	20¾	342	89
Fageol Street Car	29	6480	10000	....	218	HaS 50.	4-4¼x5½	Lon	Zen	Del	Del	USL	12-118	35	7.0	D. B-L	B-L 55	4	Spi	Tim 65190	W	A	Tim 1524	Ros	P 36x6	DP 36x6	Bud	38	22½	339	89
Federal	25	5450	.....	2500	190	Con 6B	6-3¾x5	Mod	Zen	Eis	Rem	Exi	6-185	35	6.0	P. B &B	Det R400	4	Spi	Tim 6566	W	A	Own	Gem	P 36x6	P 36x8	Smi	28	30	266⅜	....
Fifth Ave. J	25	5850	8530	2780	172	Yell EZ	4-4x6	Own	Zen	Eis	N-E	Wil	12-90	30	7.5	P. Own	Own J	4	Sne	Tim 6412	W	A	Tim 1523	Ros	P 36x6	DP 36x6	Bud	33	29½	277	87½
Fifth Ave. L	55	6850	12040	5190	174¾	Yell EZ	4-4x6	Own	Zen	Eis	N-E	Wil	12-90	27	5.0	P. Own	Own L	4	Sne	Own L	I	B	Own L	Ros	S 36x5	DS 36x5	Own	33	25	296	90
Garford 51D	29	6500	9900	3400	187	Bud Bus	6-4x5⅜	Own	Str	Spl	Rem	Wil	6-190	35	5.0	D Own	Own 51D	8	Spi	Tim 6516	W	A	Tim 1550	Ros	P 36x6	P 36x6	Day	30	28¼	295	91
Garford KB	21	3300	6000	2400	180	Wis Y.	6-3-⅜x5	Lon	Zen	A-L	A-L	Wil	6-135	35	7.3	D. B-L	B-L 31	3	U-M	Tim 5620H	B	E	Tim 1473H	Lav	S 32x6	S 34x7	Day	28	23	.....	84
Garford CB	29	6900	11300	4400	220	Wis Z	6-4½x5	Lon	Zen	Spl	N-L	Wil	12-153	57	11.9	D. B-L	B-L 60S	4	Spi	Tim 6521	W	E	Tim 1560C	Ros	S 36x6	DP 36x6	Bud	35	23	.....	....
Gary 45B	40	.....	.....	....	220	Bud GL6	6-4½x6	Chi	Str	Rem	Rem	.....	.....	.....	.....	. Ful	Ful	4	Spi	Tim	W	...	Tim	Ros	P 36x6	DP 36x6	Bud	.....	26	298	....
Gotfredson 56B-60	60	.....	.....	....	228½	Bud GL6	6-4½x6	McC	Zen	RBo	N-E	Wil	12-250	...	.....	P. B & B	B-L	4	Spi	Tim 6422	W	C	Tim	Ros	P 36x8	P 36x8	Bud	.....	24 7/16	.....	....
Gotfredson 50B-29	29	.....	.....	....	208°	Bud BUI	6-4x5⅛	McC	Zen	RBo	N-E	Wil	12-250	...	.....	P. B& B	B-L	4	Spi	Tim 6521	W	E	Tim	Ros	P 36x6	P 36x6	Bud	.....	24 7/16	.....	....
Graham Bros. YB	21	3700	6200	2500	158	Dodge	4-3⅞x4½	McC	Dod	N-E	N-E	Exi	12-90	30	4.0	D. Dod	Dod	3	U-P	Own	S	A	Own	Dod	P 32x6	P 34x7	Cla	29½	27½	248	86
Gramm & Kin. 6-15-3	15	3100	5100	2000	164	Con 8R	6-3⅜x5½	Own	Zen	A-L	A-L	USL	6-135	50	5.0	. Cov	Cov	3	Thei	Eat	B	E	Col	Ros	S 30x5	S 30x5	.....	25	28½	.....	....
Gramm & Kin. 6-20-3	20	3800	6300	2500	184	Con 6B	6-3¾x5	Own	Zen	A-L	A-L	USL	6.135	50	5.0	. Cov	Cov	3	Thei	Eat	B	E	Col	Ros	S 32x6	S 32x6	Smi	28	21	247	....
Gramm & Kin. 6-25-3	25	3800	6400	2500	184	Con 6B	6-3¾x5	Own	Zen	A-L	A-L	USL	6-135	50	5.0	. Cov	Cov	3	Thei	Wis	R	E	Col	Ros	S 32x6	S 34x7	Smi	28	22	247	....
Grass Premier ZR3	22	5150	8600	3500	200	Wau	6-4⅜x5¾	Chi	Str	Eis	Bos	Exi	6-	40	2.0	D. B-L	B-L 55	7	Spi	Tim 6566	W	E	Con	Ros	P 32x6	DP32x6	Van	33	22	298	89
Guilder 20	17	3650	.....	....	152	Con 8R	5-3⅜x4½	G&O	Zen	.....	Bos	.....	.....	.....	.....	D. B-L	B.-L 31	3	.....	Cla 501	B	...	Shu 5400	Ros	P 36x5	DP33x5	Bud	.....	25	.....	....
Guilder 26	21	.....	.....	....	180	Con 6B	6-3¾x5	G&O	Zen	Bos	Bos	.....	.....	.....	.....	. B-L	B-L 51	3	Spi	Wis 3720	R	....	She	Ros	P 32x6	DP32x6	Bud	.....	26	.....	....
Guilder 36	25	6000	.....	....	204	Bud Bus	6-4x5⅜	G&O	Zen	.....	L-N	.....	.....	.....	.....	D.	B-L 51	4	.....	Wis 1300K	R	....	She 445	.....	S 30x6	DS 32x6	Bud	.....	26	.....	....
Hahn K	27	4900	8400	....	198	Con 6B	6-3¾x5	Chi	Sch	Bos	Del	Wil	12-220	...	5.0	D. B-L	B-L	4	Spi	Wis 6730	R	A	She D484	Ros	S 32x6	DS 32x6	Bud	.....	27	Opt	Opt
Hahn L	35	6800	10300	....	245	Con 14H	6-4½x5¾	Chi	Sch	Bos	N-E	Wil	12-220	...	5.0	D. B-L	B-L 60	4	Spi	Tim 6530	R	A	She D445	Ros	S 38x7	DS 38x7	Bud	.....	28	Opt	Opt
Hahn O	20	4700	7500	....	144	Her OX	4-4x5	Chi	Str	Bos	L-N	Wil	6-110	...	7.0	D. B-L	B-L	3	Spi	Wis 6736	R	A	Wis 11A	Ros	S 32x6	S 32x6	Bud	.....	25	Opt	Opt
Int. Harvester SL	16	.....	.....	....	150	Lyc Spec	4-3½x5	.....	Own	Con	A-L	Pol	6-100	35	.....	D. Mun	Mun	3	Own	Eat	1	A	Eat	Ros	S 33x5	S 33x5	Own	.....	24	217	56
Kissel	21	.....	7725	2400	182	Own CB6	6-3 1/16x5⅛	Fed	Str	Rem	Rem	Wil	6-240	45	.....	P. B&B	W-G	3	Spi	Tim 5620H	B	E	Tim 2341H	Ros	P 32x6	P 34x7	Bud	.....	24	248	....
Larrabee X-2, L-10	15	3450	4850	1400	155	Con 8R	6-3-⅜x4½	Fed	Zen	Bos	Bos	Exi	6-80	40	8.0	D. B-L	B-L 31	3	Sne	Sal D	B	A	Sal	Gem	S 34x5	S 34x5	Ind	27	29	220	70
Larrabee XH4	25	6890	10000	3000	220	Con 6B	6-3¾x5	Fed	Zen	L-N	L-N	Exi	12-240	35	5.0	D. B-L	B-L 31	3	Spi	She	W	A	Shu 5550B	Ros	P 32x6	DP32x6	Bud	28	25	262	86
Maccar	...	7500	12000	4500	228¾	Bud Bus	6-4x5⅜	Bus	Str	DJ	Bos	Pol	6-240	40	7.5	D. B-L	B-L 55	4	Spi	Tim 6522S	R	A	Shu 610B	Ros	P 34x7	DP 34x7	Bud	41	27½	312½	92½

| | | |

Electric Commercial Cars

Name and Model Number	Total Weight Resting on Four Tires	Chassis Weight—Exclusive of Battery	Minimum Load Capacity	Maximum Load Capacity	Chassis Price	Maximum Speed	Location of Battery	Mileage Per Charge	Motor	Controller	Speeds Forward	Drive	Rear Axle	Spring	Front Tires	Rear Tires	Steering Gear	Wheelbase	Per Cent of Weight on Rear Wheels
Autocar E 1F	10000	3650	.....	.....	2400	.....	A	.....	G-E	G-E	5	R	Own	Row	S 34x4	S 34x5	Ros	107	60
Autocar E 2D	15000	4300	.....	.....	2800	.....	A	.....	G-E	G-E	5	R	Own	Row	S 34x5	S 34x6	Ros	120	60
Autocar E 3H	18000	4900	.....	.....	3200	.....	A	.....	G-E	G-E	5	R	Own	Row	S 34x5	S 36x8	Ros	131	60
Autocar E 4Y	26000	6800	.....	.....	4000	.....	A	.....	G-E	G-E	5	R	Own	Row	S 34x6	DS36x6	Ros	138	60
Autocar E 5M	30000	7200	.....	.....	4300	.....	A	.....	G-E	G-E	5	R	Own	Row	S 36x7	DS36x7	Ros	138	60
C-T-H1	5600	2400	.....	.....	.....	14	A	55	G-E	Own	4	Own	F	She	S 36x3½	S 36x4	W	108	67
C-T F-1.5	6600	2800	.....	.....	.....	14	A	60	G-E	Own	4	Own	F	She	S 36x3½	S 36x4	W	94	67
C-T H-1.5	6600	2800	.....	.....	.....	14	A	60	G-E	Own	4	Own	F	She	S 36x3½	S 36x4	W	116	67
C-T F-2	8000	3100	.....	.....	.....	14	A	50	G-E	Own	4	Own	F	She	S 36x3½	S 36x5	W	96	67
C-T H-2	8000	3100	.....	.....	.....	14	A	50	G-E	Own	4	Own	F	She	S 36x3½	S 36x5	W	124	67
C-T F-4	11950	4200	.....	.....	.....	12	A	50	G-E	Own	4	Own	F	She	S 36x4	DS36x4	W	116	67
C-T A-7	17700	5800	.....	.....	.....	11	A	45	G-E	Own	4	I	D	She	S 36x6	DS36x4	W	122	58
C-T F-7	17800	6000	.....	.....	.....	11	A	45	G-E	Own	4	Own	F	She	S 36x5	DS36x5	W	136	67
C-T A-10	22250	6500	.....	.....	.....	10	A	45	G-E	Own	4	I	D	She	S 36x7	DS36x5	W	132	58
C-T F-10	22750	7000	.....	.....	.....	10	A	45	G-E	Own	4	Own	F	She	S 36x6	DS36x6	W	152	67
Electruck 48	8700	3600	2000	3000	2000	15	A	50	G-E	G-E	4	C	Own	Eat	S 34x4	S 34x5	Ros	112	60
Electruck 39	10400	4200	4000	5000	2500	15	A	50	G-E	G-E	4	C	Own	Eat	S 34x4	S 34x6	Gem	122	60
Electruck 27	32000	12200	15000	20000	6000	12	A	50	G-E	Own	5	C	Own	Eat	S 36x7	S 40x14	Gem	168	70
Milburn 43	3790	1690	1000	1500	1585	17	H	50	G-E	Own	4	W	She	She	P 32x4½	P 32x4½	Ros	115	60
O. B-B	.....	.....	.....	.....	.....	13	.....	.....	G-E	Own	....	C	D	.....	S 36x4	DS36x3½	Own	107	.....
O. B-C	.....	.....	.....	.....	.....	11	.....	.....	G-E	Own	....	C	D	.....	S 36x5	DS36x4	Own	135	.....
O. B-D	.....	.....	.....	.....	.....	10	.....	.....	G-E	Own	....	C	D	.....	S 36x6	DS36x5	Own	143	.....
Steinmetz 15	6800	2200	1000	2250	1800	18	H&S	60	Own	Own	4	R	Own	Lig	P 32x4½	P 32x4½	Lav	114	55
Walker 12	.....	1900	.....	1000	.....	15	H&S	50	G-E	Own	4	.....	Tim	Det	S 36x3½	S 36x3½	Ros	104	66
Walker 15	.....	2800	.....	1500	.....	14	A	50	Wes	Wes	5	Own	Own	Mat	S 34x3	S 36x3½	Ros	94	66
Walker 22	.....	3000	.....	2000	.....	13	A	50	Wes	Wes	5	Own	Own	Mat	S 34x3½	S 36x4	Ros	101	66
Walker 42	.....	4200	.....	4000	.....	13	A	50	Wes	Wes	5	Own	Own	Mat	S 36x4	S 36x6	Ros	114	66
Walker P	.....	6000	.....	7000	.....	11	A	40	Wes	Wes	5	Own	Own	Mat	S 36x5	DS38x5	Ros	131	66
Walker N	.....	6700	.....	10000	.....	10	A	40	Wes	Wes	5	Own	Own	Mat	S 36x6	DS38x6	Ros	141	66
Walter HD	6800	2300	.....	2000	2200	16	A	60	Diehl	G-E	5	B	.....	.....	S 32x3½	S 32x4	Ros	98	60
Walter EN	13200	4400	.....	5000	3100	15	A	50	G-E	G-E	5	Own	D	.....	S 36x4	S 36x7	Gem	114	60
Walter EL	16800	5000	.....	7000	3700	13½	A	50	G-E	G-E	5	Own	D	.....	S 36x5	S 36x4	Gem	132	60
Walter ES	23600	7200	.....	11000	4500	12	A	50	G-E	G-E	5	Own	D	.....	S 36x6	S 40x6	Ros	150	70
Walter ER	28400	7500	.....	15000	4800	11	A	50	G-E	G-E	5	Own	D	.....	S 36x7	S 40x7	Ros	150	70
Ward A211	4650	1800	600	1150	.....	15	S	75	G-E	Own	4	W	She	She	S 32x3	S 32x3½	Own	88	56
Ward B-222	6000	2300	1020	1700	.....	14	S	84	G-E	Own	4	W	She	She	S 32x3½	S 32x4	Own	91	62
Ward C-211	8000	2670	2170	2880	.....	13	S	65	G-E	Own	4	W	She	She	S 32x3½	S 34x5	Own	96	64
Ward E-211	12000	3570	4290	5430	.....	12½	S	56½	G-E	Own	4	W	She	She	S 34x4	S 36x6	Own	108	65
Ward G-211	16000	4500	6180	7760	.....	11	S	44	G-E	Own	5	W	She	She	S 36x5	S 36x8	Own	120	68
Ward J-211	22500	6630	9500	11200	.....	10	S	39½	G-E	Own	5	W	She	She	S 36x6	S 36x10	Own	136	70
Ward M-211	30000	8430	13780	15920	.....	9	S	36	G-E	Own	5	W	She	She	S 36x7	DS36x7	Own	152	71

NOTE: Battery Equipment on all above makes is at the option of the purchaser. Battery Location Abbreviations: A-amidships; H-under hood; and S-under seat

Management, Circulation, Etc. Statement of Ownership,

Required by Act of Congress of August 24, 1912

OF COMMERCIAL CAR JOURNAL published monthly at Philadelphia, Pa., for April 1st, 1926

State of Pennsylvania,
County of Philadelphia, ss:

Before me a Notary Public in and for the state and county aforesaid, personally appeared A. W. Brownell, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the COMMERCIAL CAR JOURNAL, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication, for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations printed on the reverse of this form to wit:

1. That the names and addresses of the publisher, editor, managing editor and business manager are:
   Publisher, CHILTON CLASS JOURNAL Company, Chestnut and 56th Sts., Philadelphia, Pa.
   Editor, Albert G. Metz, South Ardmore, Pa.
   Managing Editor, Julian Chase, Tarrytown, N. Y.
   Business Manager, A. W. Brownell, Merion, Pa.
2. That the owners are:
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3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.
4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholders or security holder appear upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders, who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and that this affiant has no reason to believe that any other person, association or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

A. W. BROWNELL,
Business Manager.

Sworn and subscribed before me this 24th day of March, 1926.

(Seal) Arthur L. Homer.
(My commission expires March 6th, 1927).

Oklahoma Time Table

The publication of a time table for the motor bus lines in Oklahoma is being carried on by the Shelburne Motor Co., Reo dealers of Oklahoma City, as one move in a plan to establish themselves as headquarters for bus information.

The time table is issued quarterly and is sent free of charge to all bus operators in the state. A charge of 25 cents is made to riders for the schedule and copies are on sale at news stands through the territory.

The Shelburne company took over the time tables after a company, organized for the purpose of publishing the tables, gave up the job after issuing three or four numbers.

A list of all bus operators in the state was secured from the state commission and letters were sent to each one asking for a schedule. At first several letters were required to get a reply in some cases but now all of the operators are anxious to have their schedules included in the book. No charge is made to the operator for the listing.

BETHLEHEM
Rolled Steel Truck Wheels
for strength and resiliency—

BETHLEHEM STEEL COMPANY, General Offices: BETHLEHEM, PA.

District Offices in Boston, New York, Philadelphia, Baltimore, Washington, Atlanta, Pittsburgh, Buffalo, Cleveland, Detroit, Chicago, Cincinnati, St. Louis, Seattle, San Francisco, Los Angeles

BETHLEHEM

C. C. J. SHOP IDEAS

THIS page is primarily designed to help service station repairmen in exacting economies in time, labor and money. Salesmen, however, can also profit by scanning over these practical hints. The average buyer of today is more conversant with the important details of truck operation and maintenance than ever before. A money-saving idea will often result in a sale.

Commercial Car Journal will pay as much as five dollars for each new idea which it accepts. Simply tell us exactly how it is done and send a rough pencil sketch showing clearly the method employed or the device used.

No. 70—Supporter for Work in the Pit

A device for lowering, supporting and raising heavy units in a pit as shown in the illustration will be found useful in the shop. The frame is made of pipe, elbows and other fittings. The rollers are not essential but they make it easier for the mechanic to move the work back and forth in the pit.

The elevating mechanism consists of a screw, screw handle, screw block and supporting platform.—Wm. Compton, Pittsburgh, Pa.

No. 71—Welding Table

Where considerable welding is done a special table of the type suggested in the sketch will be a good investment.

The legs are made of angle iron welded to the frame-work which supports the brick top. The frame-work is also built of angle iron with strips of lighter metal supporting the bottom, of light boiler plate. The top cavity is lined with fire brick.

The fire brick retains the heat during a preheating job better than a metal table surface. A rack for holding tools at the end of the table is made of a rod fastened to the frame-work. This rack will keep the tools where needed for jobs.—George Fischer, St. Louis, Mo.

No. 72—Heavy Duty Truck

A heavy truck for moving parts of great weight in the shop is shown in the illustration. The frame is of hardwood and the top surface is covered with sheet metal. The castors or rollers should be of sturdy design and bolted to the bottom of the truck securely, so there is no danger of them being pulled off.—Wm. Bossing, Asheville, N. C.

No. 73—"Horse" for Wheel Work

A mounting for wheels for painting, or similar operations, indicated in the drawing will save time in the shop. 4 x 4s will do for the uprights and base. The construction is clearly shown. The wheel is supported by a pipe inserted in the "U" notches in the uprights.—J. W. Tennehill, New Brunswick, N. J.

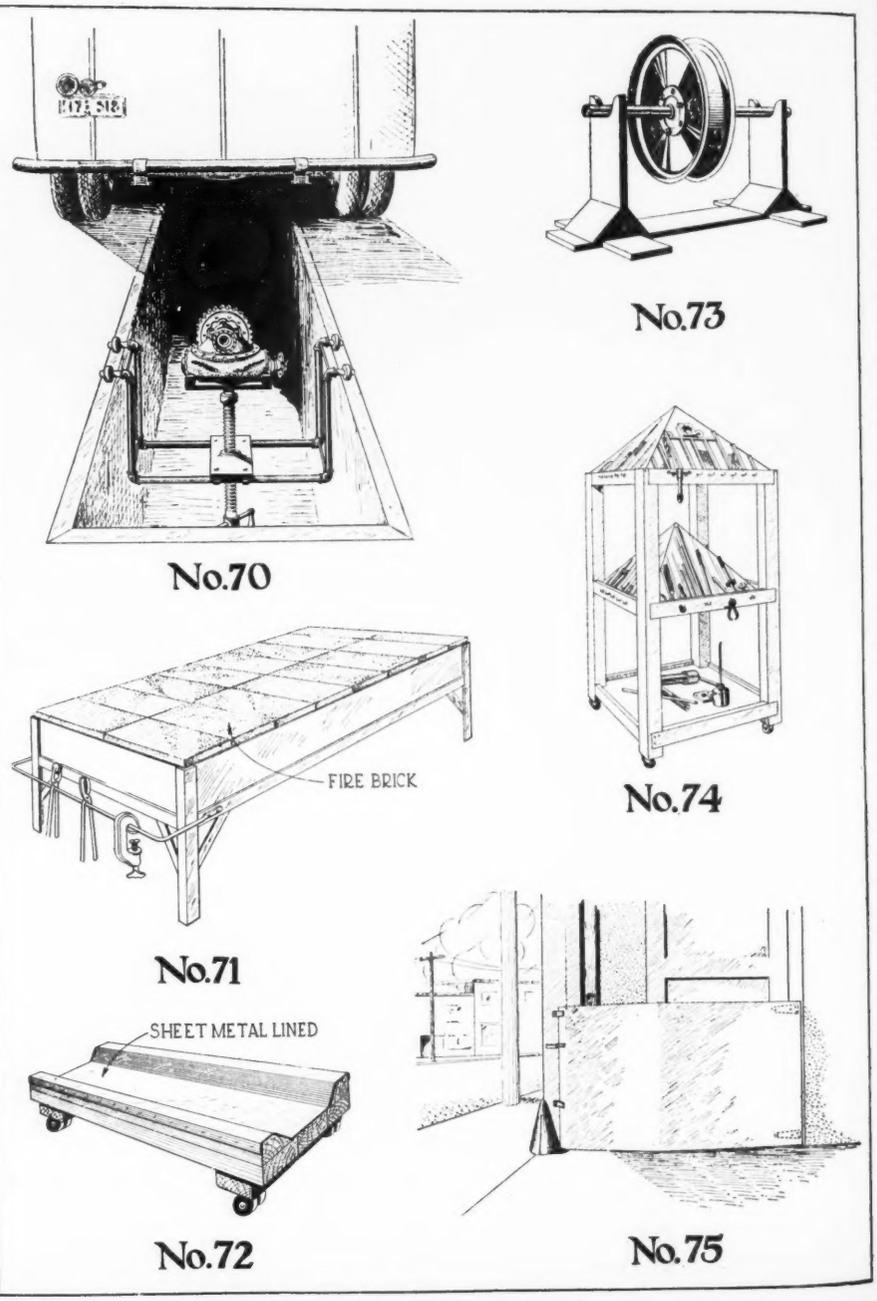
No. 74—Portable Tool Rack

A portable tool rack, of simple construction, which carries tools to the point where the mechanic is working, is shown in the illustration. The rack suggested consists of three compartments laid out in a fashion that will enable it to carry practically all the hand tools likely to be required on any repair job. It can be shifted from place to place so that the busy mechanic always has his tools quite close at hand, thereby dispensing with repeated trips to the other side of the building to get them.

It is simply constructed, consisting of four uprights which support an apex top, a middle section of the same type and a flat bottom. The apex compartments are divided off into smaller sections to receive any type or size of tool by wood strippings tacked in place. Hooks may also be secured on cross members for hanging odd items of equipment. Four substantial castors are secured in the base of each of the uprights.—C. M. Sullivan, Norfolk, Neb.

No. 75—Metal Door Guard

To prevent damage to entrance doors and frames in service stations a sheet metal guard will be found effective. The guard is shaped and mounted as shown in the sketch. One end of the guard is hinged and the other is held in place by two bolts which are loosened when the guard is to be swung out of the way.—C. Leach, New York City.



NOW HE HAS TIME TO SMILE

THIS driver used to wear a frown that came from the strain and anxiety of a constant *battle* with the wheel of his bus. Now that he drives a Ross-equipped bus, he has the *time* and the *inclination* to smile. Ross Cam and Lever steering has made his job easy—made the wheel his servant instead of his master. He's happy now—so's his boss. Let us tell you how Ross makes bus operation easier.

ROSS GEAR AND TOOL COMPANY . . Lafayette, Indiana
MEMBER MOTOR TRUCK INDUSTRIES, Inc., of AMERICA

ROSS

CAM *and* LEVER STEERING GEARS

EASIER STEERING LESS ROAD SHOCK

Showing part of a fleet of over 100 bodies sold the State Highway Department of Tennessee
The bodies which are made by Anthony Co., Inc., Streator, Ill., and sold by the George Cole Motor Co., of Nashville, Tenn., represented a deal that totaled $150,000.

GMC Offers "Big Brute" 10 and 15-Ton Tractor-Trucks

The General Motors Company has introduced a new line of GMC "Big Brute" tractor-trucks in 10 and 15-ton capacities. These new models are companions to the "Big Brute" three and one-half and five-ton trucks recently announced and provide a complete new line ranging in capacity from one to 15 tons.

Tractor-trucks, while closely following the principles of the "Big Brute" trucks, have been specially designed for heavy-duty work.

To meet the requirement of a shorter turning radius these new tractor-trucks have a turning radius of 17 ft.—less than required for even the smaller passenger cars. These tractor-trucks with a semi-trailer attached, can turn around in a 34-foot street without "jockeying," even with the length of the trailer equal to the width of the street itself.

In combination with this short turning radius, the GMC worm and split nut steering gear gives these tractor-trucks unusual maneuverability. Specially designed front springs, double progressive rear springs and Fisher built cab are standard equipment.

The power plant is a 53 horsepower GMC engine with a two-range transmission which has a reserve pulling power 30 per cent greater than is possible with the same engine and 4-speed transmission. This permits starting the heaviest load easily and without any undue strain on any part.

In addition to this easy starting, the two-range transmission provides pulling power on steep grades at the same time giving adequate road speeds. A low hung frame is used which makes possible the use of any automatic fifth-wheel on the market.

When the Factory Becomes a City

(Continued on page 19)

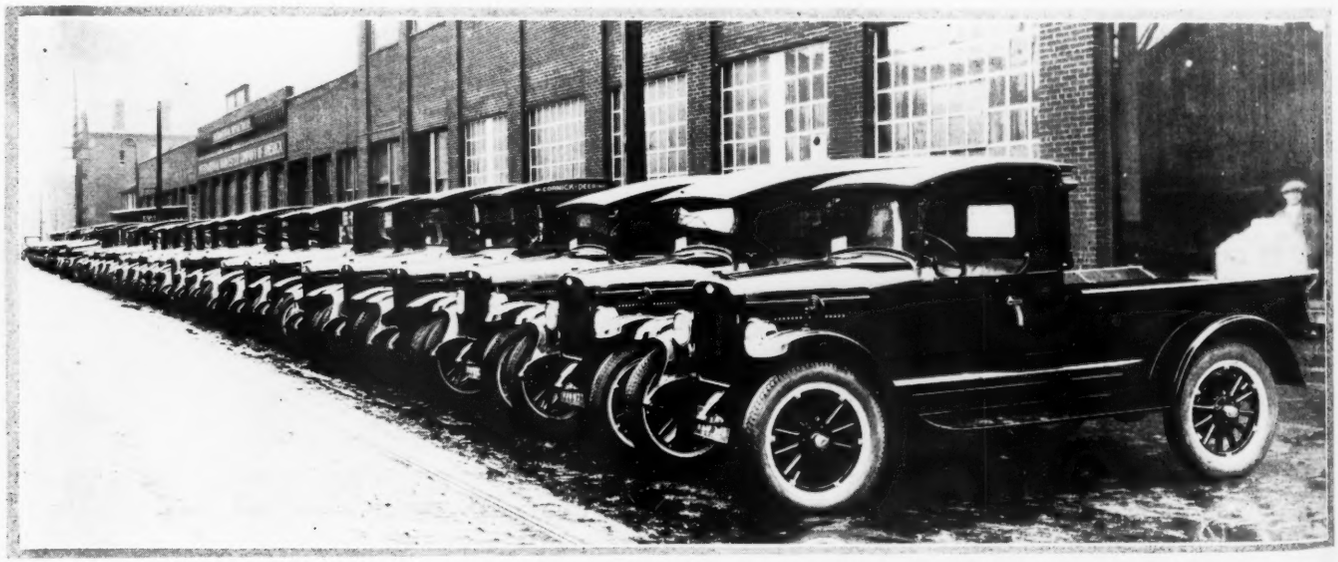
direction of a labor and transportation foreman, whose duty it was to coordinate the movements of the equipment.

The value of the trailer lay in the fact that the motive power was detached and therefore unhampered by the delays—due to loading—of the carriers, and that one man on a tractor could operate two, three, or four trailers very handily. The dispatching system utilized these advantages by spotting trailers and men at the various points where waste materials accumulated. The daily demands on the fleet were predetermined, the foreman knowing by experience the amount he might expect at the various points.

To this routine disposal work, the construction work within the plant or the yards could be added as it became necessary, and a daily renovation of the system could be made to meet the demands. Dump trailers having a rated capacity of three tons, but an actual capacity of between four and five tons, were purchased for the waste hauling and platform trailers for carrying girders, castings, etc.

The economy of the trailer-tractor method of hauling lay in the following factors: A single tractor can pull a train of two, three, or four trailers, carrying much larger loads than the horse-drawn vehicles formerly used. This method permits one man to do work that used to require four or five; first, because he can handle much greater loads, and, second, because none of his time is wasted in idleness during loading periods. The tractors, under the direction of the foreman, are constantly on

(Continued on page 52)



62 trucks were delivered in one day to the new exclusively truck Buffalo branch of the International Harvester Co.

DEALERS!

We Have a Message for You—

RUGGLES is growing. Motor Trucks, Road Builders and Motor Busses with a RUGGLES nameplate on the radiator are seen throughout this country as well as in foreign lands.

There yet remain a few valuable RUGGLES dealer franchises that soon will be allotted to live dealers.

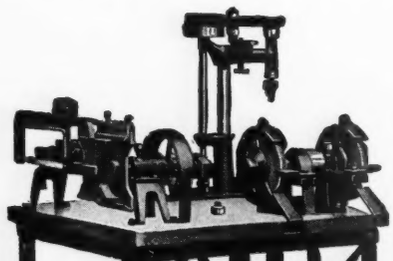
**Our proposition will interest you.
Write or wire for complete details.**

RUGGLES MOTOR TRUCK COMPANY
SAGINAW, MICHIGAN, U. S. A.

RUGGLES
IT'S A GOOD JOB

Manley Machine Shop Unit

Power hack saw, grinder and drill press have been combined in the Manley shop unit. The three tools are mounted on a wood table with braced steel legs. The shafting is mounted in two self-centering bearings. The motor is controlled by a snap switch on the



Combined hack saw grinder and drill

top of the table. Each machine is controlled separately. The advantage claimed for the unit is that it eliminates line shafting, counter shafting and motor brackets which would be required for the three separate machines.

With ¾ hp., 110-volt A. C. motor the unit lists at $285 and with a ¾ hp. D. C. motor at $295. Manufactured by the Manley Mfg. Co., York, Pa.

Industrial Bulletin on Certified Malleable Castings

Four of a series of bulletins on certified malleable castings have been issued by the American Malleable Castings Association. The first covers the subject of tests, the second tensile strength and elongation, the third association research and the fourth uniform strength from skin to core.

The bulletins are of particular interest to designing engineers, purchasing agents and other officials interested in better construction materials. Drawings and photographs are used to illustrate the articles. A list of the producers holding certificates of the Association is given in each bulletin.

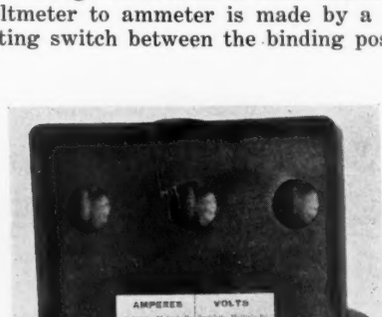
Bridgeport Pump Catalog

A new catalog describing their line of tire pumps has been issued by the Bridgeport Brass Co., Bridgeport, Conn. The catalog of 16 pages with cover describes and illustrates the various types of tire pumps, tool kit hand pumps, pressure lamp pumps, football inflators, oil and grease guns and hub caps for Ford cars.

G. E. Offer Portable Volt-Ammeters

The General Electric Co. has designed the type DS-2 portable volt-ammeters as a compact and accurate direct-current instrument, suitable for general testing purposes.

Six scales, three for voltages and three for amperes, are incorporated in each of the meters. One of each reads direct, and the others in multiples of 10 or 2. The change from scale to scale and from voltmeter to ammeter is made by a rotating switch between the binding posts.



G-E Combination Portable Meter

Voltages up to 150 and currents up to 30 amperes can be checked with the DS-2 meters.

Cleveland Welding Now Making Pneumatic Truck Rims

In line with the trend of the motor truck industry in the use of pneumatic tires The Cleveland Welding & Mfg. Co., of Cleveland, announce that they have added truck rims for pneumatic tires to their line.

These rims are being made in all sizes —to meet all needs.

Cleveland Welding has specialized for the past 15 years in the making of rims and the rolling of difficult sections in circular form. The fact that a considerable portion of their personnel consists of men with experience in rim manufacture antedating this 15 year period. They are looked upon as pioneers in the truck rim field.

When the Factory Becomes a City

(Continued from page 50)

the go drawing waste to the dump which may be anywhere from an eighth to a quarter of a mile away, and either inside or outside the premises. The accumulation of waste, instead of being thrown in piles in the yard, is put at once into spotted trailers. As fast as these are filled up they were coupled to the tractor and carried off to the dump.

The same tractors, when not engaged in pulling dump trailers, are accessible for use with platform trailers loaded with construction material or other cargo. The ease with which a trailer-tractor unit may be handled makes transportation inside the factory buildings easy and convenient. A tractor can pick up a ready trailer bound either for the dump or some point inside the plant.

The experience of this company—which has several times enlarged its first trial fleet and made trailers and tractors a permanent part of its equipment, is typical. The trailer principle frees the motive power for maximum service. The tractor does not waste its force in carrying the load, and the capacity of the carrier per unit of motive power is, therefore, greatly increased. Moreover, a wide range of construction changes to meet the individual demands of a user is made possible because the trailer has no driving gears to interfere. Along with these advantages go the large savings in labor, running expenses, wear and tear, and initial cost.

Views of the new 30-pupil Studebaker School Bus

The body designed especially for school work, is mounted on the 184 in. bus chassis. A special bus body, accommodating 40 pupils, is also available. Either single or dual rear wheels are supplied. Three lengthwise seats are shown. Windows are adjustable. Five ventilators are fitted. The entrance door is controlled by the driver and there is an emergency door in the rear.

Reo Sales Gain 10% in Six Months

An increase of business of more than ten per cent for the six months period ending February 28. compared with the corresponding period of the previous year is reported by the Reo Motor Car Co. Profits, after allowing for Federal taxes, amounted to $1,854,408 according to the report. A decline in the amount of cash and an increase of inventory and accounts receivable is noted in the statement.

Increased sales have resulted in increased production schedules since the first of the year. A new record of 223 units shipped in one day late in April reflects the boost in production to keep up with sales.

Both May Use "Bosch" Name

The Bosch name may be used by both the American Bosch Magneto Co. Inc. and the Robert Bosch Magneto Co., according to a decision of Supreme Court Justice Levy made recently.

The decision confirms the right of Robert Bosch to conduct a magneto business in his own name "except that such right would not authorize him to employ such name in a manner or form to lead consumers to believe they were purchasing the plaintiff's (American Bosch) product." The claim of the Robert Bosch Company to monopoly of the name "Bosch" was not allowed and both companies may use the term as a part of their titles.

Business Good in Northwest

Trade conditions in the northwest are the best in years, according to Phil Mallery, general sales manager of the Moreland Motor Truck Company, who has just completed a trade survey of Washington, Oregon, Idaho and Utah.

The lumber industry is on the boom with tremendous activity centered around Centralia, Washington. The wheat country in the vicinity of Pendleton, Walla Walla and Spokane will have bumper crops all of which means the purchase of new transportation units. Fruit growers in both Washington and Oregon are in a very posperous condition he reports.

Unified Design and Equipment Regulations

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Windsor T. White, of the White Co., presided at the meeting. Among others present were H. V. Loveland, Studebaker; Walter J. Baumgartner, Garford; W. R. Gordon and S. W. Mills, Pierce-Arrow; H. J. Cupper, General Motors; F. A. Whitten and Paul Weeks, American Car & Foundry Motors; B. J. Lemon, U. S. Rubber; James L. Yarnan, Service; More, Selden; Goldie, Ruggles, and Alfred Reeves and E. F. Loomis, National Automobile Chamber of Commerce.

New Overhead-Valve Head for Fords

A new overhead-valve head for Fords is being made and marketed by the Williams Foundry & Machine Company, Akron, Ohio, under the name, "Akron-Hed." The valves are operated by annular balls, close packed in grease in seamless operating tubes which are equipped with grease clips so that new grease may be shot easily through the tubes.

This new system distributes wear over large areas of tubes and balls instead of concentrating wear at three points of the usual rocker arm mechanism. Rocker arms, rocker arm bearings, rocker arm ball joints, shafts and stand are entirely eliminated, allowing ideal locations for valves and spark plugs. The retail price is $67.50.

Harvester Co. to Open Albany Branch

A factory branch service station for trucks and buses is being built by the International Harvester Co., in Albany, N. Y. The branch will serve eastern New York, and parts of Massachusetts, Vermont and Connecticut.

A complete line of parts will be carried for the accommodation of dealers and owners. The new building will have 45,000 sq. ft. of floor space and is located on Broadway, near the present Harvester building. Increase in business necessitated moving the service department to larger quarters.

G-H Adds Valve Stem Keys

A complete line of valve stem keys, for drilled or slotted valve stems, has been added to the ten different products of the G-H Co. of Baltimore, Md.

A counter carton containing an assortment of 100 of each of 30 different styles and sizes has been prepared for the jobbing trade.

Better Repair Facilities Needed in the Bus Business

(Continued from page 7)

as well as service standpoint. Furthermore, the dealer who establishes himself properly by supplying real service need have no fear concerning the future of the truck or bus business. The more buses and trucks on the road the greater the need for maintenance facilities. However, it will be the shop that is adequately manned with mechanics who know their business, tool equipment that eliminates unnecessary manual operation plus the ability of the whole establishment to cooperate and recognize the necessity of courteousness and responsibility, which will get the business.

A Real Salesman Needs No Inducement

(Continued from page 32)

and his correct use of and the fund of this information will count a great deal of his volume of sale. The knowledge of the business for which the truck will be required, and the very best type of equipment, together with cost of installation and operation will also save many a deal.

One could write a great deal of the question of knowledge; of the parent organization, the local organization with its service, the successful and the unsuccessful operation of motor trucks in similar work at home and other districts, etc., if space would permit. But let me mention the knowledge of human nature, as a factor that is self evident in a successful salesman. We cannot treat every prospect alike, we must be able to size up our prospect as he is a law unto himself, and must be treated accordingly. We see salesmen continually failing because they fail to successfully diagnose the type of buyer they are trying to sell. "Truly a little knowledge is a dangerous thing" for the would-be successful salesman.

Honesty to Himself

The last attribute mentioned was honesty. Honesty to himself will make him study to keep up to the times, work early and late, for he will know otherwise there is no chance for success; examine his calls and his time during the day, that he is spending it to the utmost advantage; that he is not attempting something that he is not capable of doing, either by nature or by training. We see many a man kidding himself along to sure failure.

Honesty to the firm is an absolute necessity for success; this is so self evident it need only be mentioned as a positive characteristic of a successful salesman; as also should be the attribute of honesty to the buyer, but I believe this today is the most abused.

On Misrepresentation

It is appalling, the absolute misstatements and misrepresentations that are given to prospective buyers. It forces the man who is playing the game to prove every assertion that he makes. It is astonishing how many manufacturers and salesmen can get away with it. Sometimes it casts a doubt on the old saying about fooling some people all the time and all people some time; but we know that it rings true, for watch the misrepresenter and you will soon find him out of business.

To the real salesman, salesmanship should be his hobby, and a real game—putting your wits, your training, your personality, and your intelligence against those of your opponents. If you play the game squarely and stay with it you will win out in the end, no matter whether you are selling an article "$100 or less' or one at $5000.—Fred T. Rolston, Rolston Motors, Ltd., Vancouver, B. C.